DOCUMENT RESUME

ED 243 883 SP 024 388

TITLE The Education of Young Adolescents: Implications for Schooling and Teacher Education.
INSTITUTION Queensland Board of Teacher Education, Toowong (Australia).
REPORT NO ISBN-0-7242-1320-1
PUB DATE Mar 84
NOTE 52p.
PUB TYPE Information Analyses (070) -- Collected Works - Conference Proceedings (021) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Adolescent Development; Adolescents; Emotional Development; Foreign Countries; Junior High Schools; *Middle Schools; Physical Development; *Preadolescents; School Effectiveness; Social Development; Student Characteristics; *Student Needs; Teacher Attitudes; Teacher Characteristics; *Teacher Education; *Teacher Role
IDENTIFIERS *Australia; Early Adolescents

ABSTRACT

Teacher educators, teachers, parents, and principals participated in a 1983 seminar in Australia on early adolescents. A literature review on schooling for early adolescents was prepared as background reading for seminar participants. The opening address was given by Professor Colin Power, Flinders University of South Australia, who outlined the educational needs of early adolescents and proposed a number of ways in which schools and teachers could meet these needs. In his address to the seminar, Dr. John Manning, Brisbane College of Advanced Education, suggested ways in which teacher education could help to develop in teachers the attitudes and skills which are necessary to effectively meet the needs of early adolescents. Following each of these addresses, seminar participants were invited to put questions and comments to a panel. Contents of this booklet include: (1) "Schooling for Early Adolescents: A Review of the Literature" (M. Bella); (2) "Meeting the Needs of Children in the Early Adolescent Years" (C. Power); (3) Discussion Following Power's Paper; (4) "Teacher Education and the Middle School" (J. Manning); (5) Discussion Following Manning's Paper; (6) Recommendations from Seminar; and (7) list of Conference Participants. (JMK)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED243883

THE EDUCATION OF YOUNG ADOLESCENTS

Implications for Schooling and Teacher Education

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Board of Teacher Education
Queensland, Australia

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

SP024 388

THE EDUCATION OF

YOUNG ADOLESCENTS

Implications for Schooling and Teacher Education

Board of Teacher Education, Queensland
P.O. Box 389, Toowong, Q. 4066.

A report prepared for discussion purposes by
the Board of Teacher Education, Queensland

March 1984

The material included in this report is not subject to copyright and no restrictions apply to the use or reproduction of any part of it, provided that the source is acknowledged.

National Library of Australia card number and ISBN

ISBN 0 7242 1320 1

PREFACE

During 1982, the Board of Teacher Education and its Research Committee gave consideration to the desirability of preparing some teachers to teach students in the early adolescent years. The Board decided that this issue should be discussed at a seminar in which a large number of people with an interest in the topic could participate. A seminar was therefore held at the Mount Gravatt Campus of the Brisbane College of Advanced Education on 4 June 1983. Teacher educators, teachers, parents and principals participated in the seminar. A literature review on schooling for early adolescents was prepared as background reading for seminar participants.

The opening address was given by Professor Colin Power, Flinders University of South Australia, who outlined the educational needs of early adolescents and proposed a number of ways in which schools and teachers could meet these needs. In his address to the seminar, Dr John Manning, Brisbane College of Advanced Education, suggested ways in which teacher education could help to develop in teachers the attitudes and skills which he considered were necessary to effectively meet the needs of early adolescents. Following each of these addresses, seminar participants were invited to put questions and comments to a panel.

This report is an account of the proceedings of the seminar, together with the review of the literature. It is hoped that the report will stimulate discussion concerning ways in which our education system can best respond to the needs of young adolescents.

CONTENTS

SCHOOLING FOR EARLY ADOLESCENTS: A REVIEW OF THE LITERATURE *N. Bella* 1

MEETING THE NEEDS OF CHILDREN IN THE EARLY ADOLESCENT YEARS *C. Power* 21

DISCUSSION FOLLOWING POWER'S PAPER 31

TEACHER EDUCATION AND THE MIDDLE SCHOOL *J. Manning* 36

DISCUSSION FOLLOWING MANNING'S PAPER 40

RECOMMENDATIONS FROM SEMINAR 45

LIST OF CONFERENCE PARTICIPANTS 46

SCHOOLING FOR EARLY ADOLESCENTS: A REVIEW OF THE LITERATURE

Maureen Bella,
Board of Teacher Education

Whether they be called early adolescents, between-agers, children, young adults, or transescents, this special group of young people in the pre- and early teenage years, varying greatly in physical, mental, emotional and social development, has been and is today the focus of attention of many involved in education. These young people are at the centre of an educational movement which, in America for example, boasts today well over 5,000 schools established for the express purpose of catering for the needs of early adolescents. Middle schools have their own national journal in America, and are inputs for a growing body of research on adolescent development, special middle school curricula, teacher preparation programs and varied organisational structures. The middle school, in both the literature and in practice, particularly in Britain and America, is assuming a growing identity.

The period of early adolescence often sees some of the most significant changes in life taking place. Young people are experiencing major transitions - learning new roles, dealing with a rapidly changing body, and coming to grips with new expectations of them (Mitchell, 1979; Lipsitz, 1980). Some of these major changes are discussed below.

The Early Adolescent Phase

Since human development is a continuous process, there are no clear demarcation lines indicating entrance to or exit from early adolescence (McEwin and Thomason, 1982). All individuals pass through it in the normal process from childhood to adulthood. Nevertheless, there is a considerable amount of agreement that children in this age group are somehow "different". In general, the age group referred to is 10 to 14 (Mitchell, 1979; Thornburg, 1980a), though with earlier maturational trends of today's youngsters, the lower threshold is moving downward (Sommer, 1978; Thornburg, 1980b).

The early adolescent group has often been neglected by those with an interest in and responsibility for education (Lipsitz, 1977); however, recognition that a gap exists in knowledge about this stage of development, together with an increase in the numbers of problems experienced by early adolescents, have led to an increased interest in recent years in the education and welfare of these youth (Lipsitz, 1977; 1980).

The "transescent" designation (a term coined by Eichhorn, 1966), is based on the physical, social, emotional, and intellectual changes in body chemistry from prior to the puberty cycle to the time in which the body gains a practical degree of stabilisation over these complex, pubescent changes.

Physical development

The major characteristic of early adolescence involves periods of pronounced and accelerated growth, with skeletal, muscular, and glandular development. Variation amongst individuals is very great indeed (Vars, 1977) and girls are approximately two years ahead of boys in this physical development (Wall, 1981; McEwin and Thomason, 1982). It is generally agreed that, as a group, those in middle childhood do display considerable physical distinctness when compared with younger and older children (Blyth and Derricott, 1977). Better nutrition is partly responsible for the fact youngsters are maturing physically approximately four months earlier with each decade (Tanner, 1972; Wall, 1981). Recent evidence, however, indicates that this trend is levelling off in Western industrialised countries (McEwin and Thomason, 1982). Regardless of future maturational trends, it should be recognised, however, that rapid physical growth, when combined with other modern influences, has important implications for education.

The beginning of this growth is marked by increased height, muscular strength and other growth changes. Growth patterns differ greatly in timing and degree, and make the period of early adolescence unique when compared to other times in life (Gatewood and Dilg, 1975). The age of greatest variability in physical and physiological development is somewhere between 11 (Elkind, 1974) and 13 (McEwin and Thomason, 1982).

There is some discussion about the implications of these growth patterns for schooling. Eichhorn (1977) contends that because of the restlessness of growth, teaching

strategies should emphasise active physical involvement. Activities such as special interest classes and "hands on" experiences should be encouraged (Wiles and Bondi, 1981). Students should be allowed to move around in their classes and avoid long periods of inactive work. In addition, children at this age should not be put in a highly competitive situation with all its pressures (Eichhorn, 1977).

With the possible exception of very early life, no other growth period rivals that of early adolescence. Each individual establishes unique trademarks, idiosyncrasies and peculiarities, while many commonalities, tendencies and needs also evolve (Mitchell, 1974); consequently, it is the responsibility of educators to learn more about these differences and commonalities, and to use this knowledge wisely.

Social/Emotional Development

Emotions play a key role in the life of early adolescents. They experience greater depth and breadth of emotions, but the nature of these emotions more closely resembles those of childhood than of late adolescence (McEwin and Thomason, 1982). These emotions are not always volatile, but at times they can reach remarkable depths; nevertheless, emotions like jealousy, spite, envy, are more easily forgotten during this period than in later years (Georgiady, 1977; McEwin and Thomason, 1982), and are not as expensive personally as those found in late adolescence and adulthood (Mitchell, 1979).

Erratic and inconsistent behaviour is prevalent among emerging adolescents, with anxiety and fear contrasting with apparent confidence (Wiles and Bondi, 1981). It is not uncommon for them to lose themselves in anger, love, fear, and other emotions as they experiment with the emergence of more adultlike feelings (McEwin and Thomason, 1982). Striving for independence from family (Vars, 1977; Wiles and Bondi, 1981), becoming a person in one's own right, and learning a new mode of intellectual functioning are all emotion-laden problems for emerging adolescents. Chemical and hormone imbalances often trigger emotions that are little understood even by the transescent himself.

Adolescence is a time of shifting group allegiances as relationships are redefined in response to a desire for greater independence and self-reliance (Erikson, 1968); it is also a time for developing a sense of identity as opposed to a sense of role confusion (Elkind, 1974). Children learn to extend their search for personal identity by looking outward from their homes and immediate families for adult models to appraise and selectively imitate. Those involved try to strike a balance between autonomy without limits and the heavy doses of conformity that stifle their developing sense of autonomy and desire for increased freedom (Lipsitz, 1981). Early adolescents experience not only exceptionally turbulent emotions but a tremendous flexibility in self-concept (James, 1980). Extensive research in America has shown that this is a bad period for relationships between students and their parents (Erb, 1977; Henry et al, 1981), confirming what many parents have already learnt by painful experience. *This suggests that researchers, administrators and teachers at this level should focus more attention on linkages between home and school and help all involved to adjust.*

For the early adolescent, his new experiences are sometimes coupled with insecurity and audacity, and in moving from dependence on adults to interdependence with adults, peers, and younger children, the early adolescent experiences a range of emotions, including loneliness and psychological vulnerability, contributing to mood swings, argumentativeness and emotionalism (Henry et al, 1981; Wall, 1981). The importance of peer acceptance is a challenging feature of this age. Interpersonal relationships take on a new perspective as the peer group gains in importance and adults are looked at in a new light (Gibson, 1978; Lipsitz, 1981; McEwin and Thomason, 1982). Early adolescents have a powerful hunger to be competent and to achieve. They are concerned to learn the skills which achieve recognition and esteem from peers.

Conscience becomes more apparent during the period of early adolescence. Intense feelings about fairness, honesty, and values characterise this stage of development (Georgiady, 1977). Morality is based more upon what has been absorbed from the culture of the age group than from thoughtful meditation or reflection (McEwin and Thomason, 1982). Young adolescents begin to think seriously about the future and their role in it, a capacity which can be both anxiety-provoking and exhilarating (Lipsitz, 1981).

These young people are experiencing important social and emotional changes which have many implications for the curriculum and learning. Early adolescents should be assisted in moving successfully from the dependency of childhood to the relative independence of late adolescence and adulthood.

Intellectual Development

There are two major schools of thought concerning this aspect of adolescent development but there is a degree of commonality between the two. Many educators and researchers abide by the Piagetian model of child development which sees the early adolescent as between the concrete and formal operational stages of thinking. The concrete stage is a conceptual stage where information is organised around categories which are generalisable from one instance to another. At this intellectual level, which lasts approximately from the ages of 7-8 to 11-12, the early adolescent becomes capable of understanding a number of important logical and mathematical functions that are essential for all future thought (Smith, 1981). But the concrete operational child is governed by immediate concerns and his approach is to think about what is rather than what might be. The subsequent stage is characterised by formal thought and utilises the components of logic and deductive reasoning in decision-making (Thornburg, 1980a). This stage typically begins at approximately the ages of 11 to 12. It is at this stage that children can reason, hypothesize, formulate, verify, and perform the mathematical functions detailed in the concrete stage without the need for direct, physical contact and manipulation with concrete objects (Smith, 1981).

Enquiry-based learning is seen to be appropriate for the stage of concrete operational thinking (Blyth and Derricott, 1977). In moving from one stage to the other, students desire answers to a broad range of problems that are new to them and their world (Wall, 1981). Their new experiences make them question established values, and thus their attitudes become vulnerable.

Emerging adolescents display a wide range of skills and abilities unique to their developmental patterns. As they lose some of their dependence on what is perceived as reality, they begin to focus on what is possible. Moving toward this formal stage of thought enables some students to deal more readily with the possible and the abstract (McEwin and Thomason, 1982). They may be able to go beyond what might be and develop a high degree of intellectual curiosity (Gatewood and Dilg, 1975; Compton, 1978).

It should be realised, however, that the cognitive maturation of early adolescents is highly variable among individuals. It has been found (Toepfer, 1980) that only 14 per cent of 13 and 14 year olds have the capacity to even imitate formal operations (also Henry et al, 1981). Variability is the chief characteristic of cognitive development in early adolescence, and the majority of students are in phases of transition from concrete to formal operational thought (Arnold, 1982), which can pose problems for teachers in this area.

Another approach to the understanding of intellectual development in early adolescents which is gaining currency is Toepfer's "brain periodisation" theory: research suggests that there is a biological basis for the stages of cognitive development. This approach holds that cognitive development parallels spurts and plateaux in brain growth (Henry et al, 1981; Arnold, 1982). Brain growth has been seen to occur in spurts at 3, 7, 11 and 15-16 years, with corresponding intellectual growth. These spurts are followed by plateau periods of unusually slow development. According to brain periodisation theorists, brain growth reaches a plateau at age 12-14 (Henry et al, 1981; Wiles and Bondi, 1981; McEwin and Thomason, 1982). At this stage, it is impossible for the large majority of this age group who have not initiated formal operational thinking to develop new and higher level cognitive thinking skills. In this plateau period, the theory proposes that early adolescents should receive little exposure to new and complex ideas (Arnold, 1982). Middle grade programs should be able to identify student readiness to be challenged at varying cognitive levels if periods of brain growth can be identified (Toepfer, 1980).

Although the full effects of the brain periodisation research have not been considered by large numbers of educators, it could hold great potential for the understanding of intellectual functioning (Toepfer, 1980).

While the two approaches are similar in their delineation of stages of intellectual development during this period, the brain periodisation theory is more closely age-related and sees distinct demarcation lines in cognitive development according to biologically-based spurts and plateaux in brain growth. The Piagetian theory allows for more variability among adolescents, and, even within the individual himself, fluctuation can occur between concrete and formal operational thinking.

A confused age

It should be remembered that much joy is associated with the period of transition from childhood to adolescence and adulthood. It is a time filled with new and exciting events. It is also a time filled with many pleasures as physical growth offers many novel and intriguing experiences; as mental growth allows a more comprehensive view of the world; as social growth unveils the excitement of new peer relationships and new views of comradeship; and as psychological growth allows the emergence of the recognition of self as a primary person (Mitchell, 1979).

Nevertheless, the bulk of the literature concerning this age group notes the conflicting demands and pressures experienced by the individual, resulting in confusion and anxiety. This stage of development . . .

> ". . . is a time of being, a time of being that is filled with pain, joy, anxiety, happiness, tremendous shifts of mood, tremendous shifts in intellectual ability, from ones of astounding growth to ones of astounding regression. It is a time of unpredictability. It is a time of social roar when children are far, far more concerned with what their peers think of them than they are with what adults think. It is a time of continuously testing adults, some of it quite maddening. It is a time of high-pressured conformity to groups, and of an intolerance of those who deviate far from the norm. It is a time of intense self-doubting and a lack of self-confidence with aggressive - and sometimes cruel - behaviour toward one's peers. It is a time of questioning, deep concern, and confusion over sexual images, roles and relationships. And, it is a time to be lived fully in and of itself." (McGarvey, 1978, p.73).

The child at this stage in life is a perplexing mixture of contradictions: love/hate; activity/passivity; child/adult; depression/exhilaration (Thompson, 1976). G. Stanley Hall's Concept of Adolescence portrays the middle school student as having "energy alternating with lethargy; exaltation, with depressive gloom; childish selfishness, with altruistic selflessness; conceit, with humility; tenderness, with cruelty; curiosity, with apathy" (Fielder, 1978, p.324). It is these contradictions which served as the starting point for the development of middle schools. And whatever structure is adopted, schooling for early adolescents must come to terms with these contradictions.

Problems in the Present Structures

The learning environment typically found in either the primary or the secondary school does not provide for the unique needs and characteristics of students at this stage of their development. The organisational failure in schools today is that the basic developmental needs of youth growing towards adulthood cannot be met in the present system (Tegarden, 1979; Collins and Hughes, 1982). Secondary programs have tended to assume that students in the junior secondary schools are adolescents, while upper primary programs have tended to assume that students are pre-pubescent. And despite the different maturational rates of students, the curricula for upper primary and junior secondary levels are based on the notion of homogeneity of the age cohort. It has even been asked whether teachers are in fact aware of models of child development and stages of adolescence, since the stark realities of everyday classroom activities would tend to suggest otherwise (Smith, 1981). The *Schooling for 15 and 16 Year Olds* Report (Schools Commission, 1980) comments on the current widespread unease about schooling: confidence in the benefits of schooling individually and socially has given way to doubt and a desire for re-assurance. It found that a substantial minority of young people are uninterested in school or what it has to offer. They get the message that they are unsuited and leave early or passively endure their "sentence". This situation is seen to be unacceptable: every student should be valued and positively expected to succeed. The *Coleman Report* released in America in 1974 claimed that at least one-quarter of 13 to 16 year olds would prefer not to be at school. Husen (1979) refers to comparative studies that show, on balance, an increasingly negative attitude to schooling as students proceed through the compulsory years of the secondary school.

Much has been written on the apparent defects of secondary schooling. Conservatives (especially in Britain) complain that there has been a decline in academic standards, blame the comprehensive school for this condition, and defend a variety of institutions offering different kinds of educational programs for which students are selected according to their capacities and interests (Crittenden, 1981). Neo-Marxists criticise the school as an instrument for reproducing from one generation to the next the pattern of dominance and subordination that characterises the capitalist system of production.

Transition from primary to secondary

Our present system of secondary schooling has the effect of exaggerating the separateness of adolescents. While there is not much difference in chronological terms between students in the last year of primary school and the first year of secondary school, there is an enormous variation in organisational, curriculum, social, and learning structures between these two ages (Schools Commission, 1980). This has a bruising effect on many adolescents (Collins and Hughes, 1980), and is expressed later as a concern about the inappropriateness of discipline, indignation at the undermining of self-respect and self-confidence, a feeling that many teachers are uninterested in students as persons, the failure of schools to help with self- and interpersonal awareness, bitterness at petty punishments, and resentment at the lack of freedom.

In the Post-War period, Committees of Inquiry in the United Kingdom and Australia especially have repeatedly made reference to the "transition problem" and have made recommendations to "bridge the gap" - Scotland, 1947; N.S.W., 1957; Victoria, 1966; S.A., 1969; W.A., 1969. But primary and secondary are still locked into separate sub-systems. "It is still largely left to the child to adjust to what many conceive to be unnecessary discontinuities in his educational experience" (Power and Cotterell, 1981, p.1). The majority of children at the point of transfer to secondary schools expect and encounter identifiable problems of adjustment to secondary schools (Nisbet and Entwhistle, 1969). These problems are seen to be: lack of security, loss of identity, bewilderment caused by new and unfamiliar surroundings, relating to a large number of teachers, subject specialisation, adjusting to "new" subjects, repeating work done in primary school, and less structure in the learning process.

There is evidence of a number of schools and school systems wishing to smooth out the transition from primary to secondary (South Australian Committee of Inquiry, 1982). Year 8 centres have been established in a number of Queensland secondary schools. But -

> ". . . although there are some secondary schools making a strenuous effort to work in close collaboration with their feeder primary schools, the disjunction between primary and secondary stages of compulsory education remains with the idea that secondary teachers are subject specialists rather than teachers of skills considered elementary." (Schools Commission, 1980, p.21).

Academic orientation

This raises another commonly observed problem in the present secondary system concerning what is seen to be its academic orientation and preoccupation with preparation for tertiary study (Schools Commission, 1980; South Australian Committee of Inquiry, 1982). Complaints are often heard about the dominance of the traditional academic subjects to the neglect of other more relevant areas (Collins and Hughes, 1982). A study by Collins and Hughes found that the traditional focus of the secondary school on academic subjects is not seen as a major priority by parents, students or teachers. Interviews have also shown these results (Wright and Headlam, 1976). This academic environment of high schools has been shown to be the cause of the most frequent and persistent stresses in high schools (Power and Cotterell, 1981), and of the hostility of many students towards a system which is preoccupied with academic development at the expense of their broad personal development (Crittenden, 1981). It is claimed in such reports as the Schools Commission's document that schools are too narrowly preoccupied with intellectual work and are neglecting the broader preparation of adolescents for life in the adult world. School is seen to be failing to relate schooling to everyday life in the world - to bridge the gap between theory and practice. These concerns were also found in a study by the Queensland Board of Teacher Education on secondary schooling and the world of work (1982).

The Schools Commission study has been criticised for projecting a "class" notion in its separation of academic and life-relevant learning for different groups of children (Crittenden, 1981). In any case, the problem remains that secondary schooling is not seen to be contributing to the overall development (social, emotional, intellectual) of the students, nor is it attempting to take into account the special needs and interests of the early adolescent age group.

The Middle School

The above considerations were just some of the reasons for the establishment of middle schools, particularly in America. In addition, with the failure of the junior high schools to cater for the needs of early adolescents, the philosophy of the middle school was aimed at correcting this situation. Several factors led to the emergence of the American middle school: the late 1950s and early 1960s were filled with criticisms of American schools; measures aimed at eliminating racial segregation; increased enrolment of school-age children in the 1950s and 1960s led to ninth grade moving to the high school to relieve the overcrowded junior high school; a bandwagon effect - the middle school was "the thing to do" (Wiles and Bondi, 1981). However, two basic educational arguments were advanced for the development of middle schools - the special program needed for the 10-14 year old child in the unique "transescent" period of his growth and development; and much-needed innovations in curriculum and instruction provided through the new program and organisation of the middle school.

In Britain in the early 1960s there was widespread discontent with the practice of separating pupils at age 11 into those few who went to grammar schools and the many who went to some other kind of school, either a technical school or more usually a secondary modern school. In addition, there was a rapid increase in the numbers of pupils and of retention rates, which resulted in a shortage of buildings. These were the physical constraints and demographic facts which formed the background against which the reorganisation of secondary education on comprehensive lines took place, and out of which the middle school directly sprang (Taylor and Garson, 1982). Plans for later selection were introduced across the country. The West Riding proposals called for three blocks of education for 5-9, 9-13 and 13-18 year olds. At 8+ or 9+, pupils would transfer from a primary to a middle school for four years and at the end of this period they would all move on to a secondary school. This radical plan called for fully comprehensive education without any selection at all. An Act of Parliament came into being on 31 July 1964 which allowed for the establishment of middle schools. The arrival of middle schools on the English educational scene was due to a combination of factors, the chief of these being the need to expand rapidly the national educational provision in a period when resources were limited.

Wherever middle schools have been established, one shared characteristic has been an attempt to combine the best features of the self-contained idea of the elementary school with the best features of the specialisation of secondary schools. The South Australian Education Department believes that in the junior secondary school there is a need for a primary orientation in teaching methods, greater contact of the one teacher with the same group of students, and a less fragmented approach to the teaching of "subjects". In Britain, it was felt that the intermediate stage would give pupils entering these schools the security of the class teaching methods customary in primary schools and, some time after entry, would enable pupils to benefit from an earlier introduction to specialist teaching than was possible with 11+ transfer from primary to secondary education (Dimmock and Morgan, 1982).

Middle school characteristics

The common features of a middle school have been described as follows (Alexander, 1971; Gibson, 1978; Wiles and Bondi, 1981):

- philosophy and objectives based on uniqueness of middle school students;
- a secure home base environment for every student;
- open climate;
- a program of learning opportunities which attempts to give balanced attention to the three major purposes of school - personal development, skills of continued learning, use of organised knowledge;
- an instructional system which focuses on individual progress;
- learning experiences that emphasise continuing progress;

- interdisciplinary team teaching;
- flexible grouping and scheduling;
- provision for independent study;
- the widest possible range of intellectual, social and physical experiences;
- supplementary broad exploratory or personal interest programs;
- continuing and increasing opportunities for socialising, integrating, and interest-building activities;
- appropriate guidance services.

The uniqueness of the middle school comes not so much in grade organisation, courses, grouping, or schedules as it does in matters of attention, perception and sensitivity. It should be characterised organisationally by flexibility, instructionally by individualisation, and environmentally by sensitivity to changing needs of the group it serves. Another distinguishing feature is the shift in emphasis from mastery to utilisation of knowledge (Wiles and Bondi, 1981).

Aims

Popper (1967) identified the paramount goal - "to intervene protectively in the process of education which was begun in the elementary school, mediate between the human condition at the onset of adolescence and the pressures of culture and continue the general education of early adolescence in a curriculum applied in a psychosocial environment which is functional for learning at this stage of socialisation" (p.291).

Ideally, the middle school is successful because it serves the transitional function in the social development of adolescents; develops learning styles from the concrete elementary mode to more formal methods used in secondary schools; and it accepts vast variations in youth at this stage (Curtis, 1977). According to the literature, the middle school should help students in the development of -

- independence and self-reliance;
- healthy self-concepts;
- viable ethical and values systems;
- a process orientation;
- adequate learning skills;
- self-evaluation skills;
- socially responsible behaviour and new social sex roles;
- physical skills and appropriate health habits and acceptance of increasing changes in one's physique;
- knowledge base for continued learning;
- organised knowledge and concepts necessary for everyday functioning;
- curiosity;
- appropriate interpersonal skills (Lipsitz, 1980; McCann, 1981).

The middle school must allow for independence while recognising the need for security; it must encourage divergent thinking while recognising the need for a stable foundation (Jones and Garner, 1978).

There is much agreement concerning the aims of middle schools:

- to serve the educational needs of the in-between ages in a school bridging the primary/secondary gap;
- to provide optimum individualisation of curriculum and instruction for a population characterised by great variability;
- to promote continuing progress through phases and levels of the total educational program; and
- to facilitate the optimum use of personnel and facilities available for continuing improvement of schooling (Gibson, 1978).

Recent public statements on desirable directions for secondary education in Australia seem to reiterate some of the aims of middle schools. Compulsory schooling should enable children to acquire the skills of literacy and numeracy on which control of their own future learning depends; give them an introductory knowledge of the common political values and social institutions; train them to observe the common social morality and to know, as far as possible, why they should; and ensure that they receive the basic knowledge and training for healthy physical development (Crittenden, 1981). The key objectives are full personal development and the acquisition of knowledge and skills for intelligent participation in the economic, political, and cultural life of the society. The *Schooling for 15 and 16 Year Olds* Report reiterates some of these imperatives, but separates students into two distinct groups - those bound for tertiary study and the others.

Organisation of The Middle School

While the number of different organisational structures adopted is almost as great as the number of middle schools themselves, there is nevertheless a significant degree of consensus concerning the fundamental features of a learning environment catering specifically for the needs of early adolescents. The organisation of middle schools takes some elements of the primary school and some of the secondary school, combining them to better suit this group.

While there is some variation in the age range covered in middle schools, the tendency is for these schools to cater for children in the 10-14 years group. Teachers are committed to the special needs and characteristics of the age group, and flexibility in taking account of these needs is paramount in any program. Mostly, middle schools are separate organisations, but sometimes they are a special unit of a K-12 or K-10 school. While physical, organisational considerations are important in the establishment of middle schools, most attention is often directed to internal considerations.

The typical middle school involves teachers in the decision-making processes (McGee and Blackburn, 1979). In Britain, in the introduction of middle schools, since teachers were assumed to possess the relevant technical expertise, and were going to be responsible for implementing and making any proposed scheme work, it was deemed important to involve them in the early policy stage of formulation (Dimmock and Morgan, 1982). Thus working parties of teachers were formed and gave advice to the Director of Education. Unity in staff planning is considered an important and unique feature of middle school programs (Garvelink, 1973). The participation of students in the planning, implementation and evaluation of programs is also seen to be necessary (Vars, 1977).

Teaming

Those responsible for staffing the middle school stress the selection of teachers who, while competent in subject areas, are pupil-oriented rather than subject-matter-oriented (Billings, 1976). The use of interdisciplinary teaching teams is generally considered an administrative and instructional advantage for middle school children (George, 1977; McGee and Blackburn, 1979; Lounsbury, 1981). This organisational approach allows the schedule builder to construct blocks of time for the team to teach and plan together. The interdisciplinary team is a combination of teachers from different subject areas who plan and conduct instruction for particular groups of pupils (Wiles and Bondi, 1981). The aim of interdisciplinary teaming is to promote communication, co-ordination, and co-operation among subject matter specialists. The interdisciplinary pattern is common in middle school designs.

Fundamentally, interdisciplinary teaming assigns a teacher from each of the basic subject areas - English, social studies, science and maths - to a group of one hundred or more students. These four teachers are given a block of time - for example, roughly equivalent to four periods - in which to teach, and an instructional area or group of rooms. Considerable flexibility allows team teaching and variations in the time allotted to subjects, the subject group sizes, and the types of activities involved. *The success of the middle school movement will depend on its ability to break the stranglehold of the subject-class-teacher arrangement for organising instruction.* The team approach allows a child with a teacher conflict to go to another teacher on the team. It also maximises the resources and expertise of individual teachers, enabling students to benefit from instruction planned by specialists (Lounsbury, 1981). Providing new and frequent opportunities for cross-fertilisation between disciplines and for grouping and regrouping of students, the team concept

promotes a co-operative approach to instructional supervision and includes frequent opportunities for peer observation. Teachers can thus become familiar with new approaches being used by their colleagues and develop a mutual sharing of ideas.

The interdisciplinary team approach is based on at least four premises (Wiles and Bondi, 1981):

- that teachers in the middle school need to be specialists in a single subject discipline;
- that, while paying attention to the need for teacher competency in single disciplines, it is well to keep in mind the child-centred philosophy emphasised over the years in the elementary school;
- that the teacher team organisational pattern provides the stimulation resulting from the interaction of a number of teachers;
- that the team organisation allows many opportunities for progress in the direction of large and small group instruction and independent study.

Nevertheless, research studies report mixed success with interdisciplinary team teaching (Wall, 1981). Successful team teaching requires special in-service or pre-service training and sufficient team planning time.

Scheduling

The interdisciplinary team is the most frequently cited characteristic of a modern middle school, and the team concept carries with it some assumptions about scheduling (Gallina and Miller, 1977; George, 1977; Lounsbury, 1981). Usually, a cyclical scheduling pattern is used for various exploratory areas - e.g. a nine-week session on art, music, homemaking, or individual arts. Physical Education demands a specific and independent schedule, since it uses special facilities and personnel. Scheduling in the middle school is a major instructional activity, one which reflects understanding of human growth and development, agreed-on school objectives and purposes, and available human and physical resources. Ideally, it reflects the needs of students more than the preferences of teachers.

Various patterns of management are found in middle schools, from the school management model where representatives of instructional teams liaise with the school administration, to the co-ordinating team model where a team of administrators makes the maior decisions, to the total school organisation plan where teachers and administrators are involved in co-operative planning.

A flexible organisational pattern in the middle school means that different student groupings are employed. Such patterns include (Wiles and Bondi, 1981): large group - 120-150 students together to present introductory material, hear speakers, administer tests; medium or class size - 20-35 students; small group - groups of students with common interests or skills; one-to-one - teacher to student or student to student; and independent study.

Students move about to a moderate degree in groups of different sizes and types arranged by the teacher teams in accordance with pupils' needs. A student becomes acquainted with several teachers and different groups of children while essentially attached to one teacher and one room.

Since adolescence is a time of pronounced individual differences, middle school programs need to promote continuous progress, focusing on individual needs, achievement level, abilities, interests, rate of learning, and style of learning (Gallina and Miller, 1977; Brown, 1981). Many middle schools retain grade levels for accounting purposes, but devise a curriculum where youngsters are working at different levels in various areas (Wiles and Bondi, 1981). There is a continuum of learning objectives to be mastered in each academic area. Some middle schools actually cut across grade lines in grouping youngsters and evolve to non-graded organisations. Another alternative is multigrading - which reschedules students by grade level achievement within a subject area (Gallina and Miller, 1977).

Because students at this age are testing their independence, discipline or classroom management is often a special challenge to middle school teachers (Wall, 1981). Rules must be enforced without making students feel punished and rejected, or setting them at odds with the teacher. The key to managing the classroom is preventative discipline.

The establishment of a clear set of teaching expectations can make existing discipline procedures more effective over a period of time (Wiles and Bondi, 1981).

The Middle School Curriculum

In the middle school, as at any other grade level, a good curriculum is one that reflects the diverse physical, cognitive, and emotional levels of the students. Early adolescent learning patterns and styles, evolving identity, and increasingly sophisticated developmental tasks demanded of them are so diverse at this age that it is mandatory to accommodate as many different learning techniques and developmental considerations as possible (McEwin and Thomason, 1982). A curriculum that keeps early adolescents' characteristics in mind and stretches activities from concrete to formal, using a variety of subjects and teaching approaches, will be a middle school success (Wall, 1981).

Curricular activities should progressively challenge the physical, cognitive, and social development of early adolescents (Wall, 1981). Curricula designed for students' cognitive development should be diverse, recognising their short attention spans (Garvelink, 1973; Wall, 1981). A high degree of student-teacher contact, student activity varying from large to small to individual grouping, and a co-operative classroom environment where students are responsible for each other and their learning, all promote a high level of active learning.

Not all middle school students have mastered the basic skills, but without these skills, students would be ill-equipped for continued learning throughout their lives. The effective middle school offers remedial programs in reading and maths to reinforce students' basic skills (Thompson, 1976; Brown, 1981). Early adolescents also need help in sorting out and clarifying their values: they are coming into contact with a wide variety of values and beliefs which will often conflict with and call into question their own ideas (Friesen, 1974; Thompson, 1976; Wiles and Bondi, 1981). One successful program in South Carolina (Brown, 1981) gives students academic credit for leading small group discussions of younger students; these discussion sessions help them see themselves more realistically, be more independent, take more responsibility for their own lives, and make intelligent choices for themselves.

A good middle school curriculum represents a balance between academic considerations and an emphasis on developmental, exploratory experiences (Henry et al, 1981). Exploratory courses can help students define themselves and their interests at a time when self-definition is important (Friesen, 1974; McGee and Blackburn, 1979; Wiles and Bondi, 1981). Middle school education must also provide experiences in sharing and accepting responsibility (Billings, 1976). A pupil's self-concept and personal security are essential concerns for the middle school. Striving for academic competence is seen to be a given for middle schools, but considering curriculum in broader terms and realising the inherent power in guidance and caring complement the child's confidence as a learner. Some educators have called for an earlier introduction of activities which emphasise skills for continued learning, and a capacity for independent study (Friesen, 1974; Wiles and Bondi, 1981). The middle school curriculum should also involve the social development and maturity of the child (Garvelink, 1973).

The curriculum needs to be geared to individual rates of achievement in the basic skills and diverse levels of achievement (Billings, 1976; Henry et al, 1981; Wiles and Bondi, 1981). According to Elkind (1981), (also Toepfer, 1980; Wiles and Bondi, 1981), the most efficient learning occurs when there is a definite match between the stage of a student's thought structure and the level of reasoning demanded by the curriculum material. Teachers must identify students who are still operating at the concrete or lower intellectual levels in different subject areas. Appropriate concrete-oriented activities and materials must then be devised and used to enable these students to gradually progress to the formal operational level of reasoning. A graded curriculum and developmental age considerations are incompatible (Eichhorn, 1977). However, concepts of continuous progress and developmental age complement each other. Students at this stage of development have new intellectual powers which need challenge and stimulation rather than repetition (Lounsbury, 1977; Wiles and Bondi, 1981); they need discussion and the opportunity to experiment and sample. Early adolescents are filled with emotions that lie close to the surface; consequently, they still need structure but also opportunities for free expression in literature, poetry, and art.

There is general agreement that middle school programs should have two basic elements: a core curriculum usually consisting of language and communication, number,

scientific considerations, and social studies; and a set of choices involving the creative and expressive arts, health education, practical arts, environmental studies, and areas of student interest.

Moss (1971) suggests a four-area approach to the middle school curriculum:

- Area I - Skills - involves an individual and continuous progress approach in reading, spelling, writing, computation, typing, library, and listening;
- Area II - students are involved in a core program for English and social studies, tracking in maths and science, and a foreign language;
- Area III - both group and individual pursuit of the arts;
- Area IV - group and individual approach to health, physical education and recreation.

A unified arts program (McGee and Blackburn, 1979) presents a distinct advantage to the timetabler: entire teams of students from a sub-school can be moved into the related unified arts team, thus providing planning time for the team of basic teachers. Other types of curriculum include Ross's four-core curriculum in basic skills, empirical studies, aesthetics and morality (Ross, Razzell and Badcock, 1973), and Reynolds and Skilbeck's (1976) common core cultural curriculum involving work situations and modes of economic operation; patterns of social meaning; introduction to and practical experiences of principal symbolic systems of language, maths, science, history, religion, myth, the arts; recreational interests; social and political institutions; interpersonal relationships; and modes of individual creativity. Some see the middle school curriculum areas of the future as focusing on the humanities (language, social science, art and music), technology (science, maths, personal health, home economics), and personal exploration (physical education and the activities program) (Compton, 1977).

A good middle school curriculum should provide the following (Wiles and Bondi, 1981):

- learning experiences structured so that students can proceed in an individual manner;
- a common program where areas of learning are combined and integrated to break down artificial and irrelevant divisions of curriculum content;
- encouragement of personal curiosity;
- methods of instruction involving open and individually directed learning experiences;
- experiences to foster aesthetic appreciations and to stimulate creative expression;
- curriculum and teaching methods that reflect cultural, ethnic, and socio-economic sub-groups within the middle school student population.

The considerations relating to the development and implementation of middle school curricula, and the reasons for such learning experiences have necessarily obliged administrators and teachers to pay at least some systematic attention to the continuity of curriculum from each stage of education to the next, and to the need for continuing reconsideration of the educational process as a whole.

Characteristics of Middle School Teachers

For the educational processes and activities described above to be realised, correlating characteristics need to be sought and developed in middle grade teachers. Personality traits, teaching styles, and instructional competencies which predict the greatest likelihood of both successful learning experiences and career satisfaction are needed. The Coleman Report of 1981 showed that the greatest influences (of school factors) on students and learning are teachers' characteristics.

Middle schools require teachers to perform several of the following roles: generalist, specialist, resource person, consultant-adviser, planner, administrator, and collaborator. A profile of the good middle school teacher compiled from research studies (Johnson and Markle, 1979) - if somehwat super-human - stresses that this teacher should have a positive self-concept; be optimistic, enthusiastic, flexible, and spontaneous; accept students as they are; demonstrate warmth; have knowledge of developmental levels and subject matter; be able to structure instruction and monitor learning; use a variety of

instructional strategies; ask varied questions; incorporate indirectness and success-building behaviour in teaching; diagnose individual learning needs and prescribe incidental instruction, and finally be able to listen to students. Some of these desirable characteristics will be examined further below.

Knowledge of early adolescents

Foremost among essential characteristics is a thorough knowledge of human growth and development pertinent to this age group (Fielder, 1978). The pervasive turmoil accompanying physical, intellectual, and social/emotional development requires teacher understanding and acceptance.

An ability to cater for individual differences among children of this age is essential as is an ability to deal effectively with student problems in a pastoral care context (Brinkworth, 1980a; 1980b). American research supports the necessity for an understanding of the social-emotional, intellectual, physical and career development of emerging adolescents, and the ability to apply this (Brinkworth, 1980a). The teacher also needs a good understanding of levels of intellectual development of early adolescents.

Effective teachers accommodate the early adolescent's concern with peer approval and identification by arranging lessons to involve students productively in social interaction while stressing the purposes and learning outcomes of the task (McEwin and Thomason, 1982).

Liking for children of this age

The teacher needs to display enthusiasm for and commitment towards working with older children and young adolescents (Wiles and Bondi, 1981) and see as his main goal the development of the creative potential of each individual child in the middle school. To fulfil this role, he will need to be compassionate, tolerant and flexible.

The middle school teacher will have a respect for children as individuals, a tolerance for student errors, and an avoidance of favouritism (Gallina and Miller, 1977). He will have an empathy with and a sympathy for children and be child-oriented rather than subject-oriented (Henry et al, 1981).

Positive self-concept

Traditionally valid characteristics of competent teachers are of course required of middle school teachers also. However, teachers of early adolescents need additional competencies. Because of the unpredictable nature of early adolescents, teachers for middle grades must have strong self-concepts and present consistent, reliable role models (McEwin and Thomason, 1982). During this time of increased stress coupled with insecurity, young people look to adults who are in control of themselves, their lives, and their work environment. Self-awareness is thus of prime importance (Curtis, 1972) and the teacher needs to be socially and emotionally mature (Brogdon, 1978).

Teacher self-evaluation is important in the middle school: teachers need to question their actions. Self-evaluation discourages unthinking, habitual activities, and encourages teachers to justify their daily actions (Blyth and Derricott, 1977).

Knowledge of discipline areas

Middle school teachers must be able to teach in a major discipline area (Brinkworth, 1980b). In addition, they need to be able to teach across a range of general subjects or core curricula in a multidisciplinary context at the junior secondary level.

Teachers who have a basic and thorough knowledge of both the content and the variety of instructional methods suggested by that content will be more competent in making educational decisions which increase learning (McEwin and Thomason, 1982). Teachers who are knowledgeable about both subjects and students are capable of making sound educational decisions concerning the appropriate balance between teacher-directedness and student initiative.

The teacher possesses the knowledge and skills which allow students to sort information, set priorities, and budget time and energy (Wiles and Bondi, 1981).

Understanding of teaching/learning process for this age

The successful middle school teacher will have the ability to encourage independence and creativity (Gallina and Miller, 1977). He will also be able to facilitate learning, given all the variables operating at this age (Curtis, 1972). The teacher will be able to help students make the connection between abstractions and their personal lives (Armstrong, 1977).

To do this, he will need to be able to diagnose learning levels and difficulties and to prescribe appropriate programs (Brinkworth, 1980a). He will need the ability to foster problem-solving skills, self-evaluation, self-learning, values clarification, decision-making, and leadership, and to devise curriculum plans, use media, manage programs/classrooms, and apply teaching techniques suitable for the middle years age group. The ability to work with small groups of learners is another desirable characteristic (Brogdon, 1978).

Diagnosis of students' knowledge, skill levels, interests, learning styles, strengths and weaknesses and ability to prescribe relevant activities, is seen to help students achieve a high active learning time (Brogdon, 1978; Wall, 1981). Teachers require a knowledge of teaching/learning strategies that are appropriate to the needs of the students in the middle school (Fielder, 1978).

Ability to work with others

The capacity to work in co-operative and multidisciplinary teaching situations is seen to be of prime importance (Brinkworth, 1980a; McEwin and Thomason, 1982) as is the teacher's ability to relate positively to other staff members, resource personnel, students, and parents. Close interaction with parents of early adolescents is particularly important since pastoral care can only be fostered in a co-operative and open atmosphere among all concerned.

The effective middle school teacher promotes positive relationships between the school and the community, between the teacher and parents, and between various sub-cultures in the school (Wiles and Bondi, 1981).

Other personal characteristics

A sense of humour is seen to be a desirable characteristic for teachers of early adolescents (Gallina and Miller, 1977; Wiles and Bondi, 1981). Teachers also require motivation which comes from perceived rewards that one can confidently expect to accrue as a result of positive and effective participation in a program designed to meet the middle school challenge (Fielder, 1978). Effective teachers display an enthusiasm for the subject as well as for the learning process in order to encourage attention and promote student interest (McEwin and Thomason, 1982).

It is desirable for the teacher to possess a knowledge of group dynamics and an ability to organise groups which will make decisions and provide their own leadership (Wiles and Bondi, 1981).

Preparation for Teaching Early Adolescents

Teacher education programs need to take account of the desirable characteristics of middle school teachers outlined above. Crittenden (1981) maintains that there is a vast disproportion between the omnibus role the secondary school tries to play and the kinds of skills and experience that most teachers possess.

Teacher education for middle schools is seen to be in a stage of flux (Lipsitz, 1981), with little apparent consensus concerning the how and what of such programs. In America, the number and development of teacher education programs for middle schools has always been far behind the provision of programs for early adolescents in schools. There is a definite lag in the efforts of teacher education institutions to construct valid courses and to establish innovative instructional techniques appropriate for prospective middle school teachers (Krinsky and Pumerantz, 1972). Because of insufficient teacher education programs, middle schools are being forced to use elementary and secondary teachers who lack both the proper orientation to the philosophy and psychology of the middle school and adequate preparation for its organisational and instructional patterns and techniques. This would seem to sound a warning in any consideration of the establishment of middle schools in Australia, and teacher

education institutions would need to examine their role and function as initiators, rather than followers, of educational reform. However, with the increasing recognition of middle schools in America being accorded by teacher certification for middle school teachers, the number and extent of programs in tertiary institutions is increasing. In five years, the percentage of institutions reporting no effort to prepare middle school teachers has fallen from 75 to 14 per cent (Ervay and Wood, 1979).

Gatewood and Mills (1975) list twenty competency areas which should be possessed and demonstrated by middle school teaching candidates before their exit from a pre-service teacher preparation program. Most of the competencies listed by these researchers are those expected from any good primary or secondary teacher preparation program. However, those with a strong emphasis on the middle school area include -

- interacts constructively with early adolescents;
- understands the physical, social, emotional, and intellectual development process of the transescent student and organises his teaching accordingly;
- organises curriculum plans and opportunities appropriate to the middle school;
- helps students to consider alternative values and to develop personal workable valuing systems.

Just as in other areas of teacher education, middle school teachers need to be able to manage classroom groups, teach communication skills, diagnose individual learning levels and problems and prescribe for them, work with teachers across subject areas and with other resource personnel, counsel individual learners, teach problem-solving techniques, and teach students to evaluate themselves (Brogdon, 1978; George and McEwin, 1978; Wiles and Bondi, 1981).

Any middle school teacher education program must provide intensive and extensive exposure to middle-school-aged youth (Brogdon, 1978). There should also be additional direct contacts with youngsters of this age in non-academic settings (Armstrong, 1977). Courses in the teaching of reading are also desirable (George and McEwin, 1978).

The South Australian College of Advanced Education suggests the following distinctive features of a pre-service teacher education program for Years 5-10:

(i) A major study in a recognised teaching subject with associated methodological subjects. (Some educationists, e.g. George and McEwin, 1978, consider specialisation is needed in <u>two</u> areas.)

(ii) Study in an interdisciplinary area complementary to (i), e.g. intercultural studies, environmental studies.

(iii) Studies in -

- human development;
- interpersonal and group skills;
- diagnostic teaching skills;
- school/community relationships;
- language arts/communication;

(iv) Extensive field experience in Upper Primary/Junior Secondary Areas, in community/social welfare agencies and elsewhere (Brinkworth, 1980a).

These features are in line with recommendations of the National Inquiry into Teacher Education (1980) concerning desirable teacher preparation.

Many English institutions offer both "end-on" and "concurrent" courses to prepare for teaching this age range. In general, colleges offer concurrent Bachelor of Education programs and the universities offer Postgraduate Certificates in Education (i.e., end-on courses). Thames Polytechnic has a "2 + 2" program - two years of general studies followed by two years of professional preparation (Bruer, 1980). The University of Exeter has both B.Ed. and PGCE Programs in Junior/Middle School. In the PGCE program, all students take two-term units in Language, Maths, Physical Education, and Art, including the methodology of teaching these subjects. There are one-term units in Science, Drama, Religious Education and Music, as well as the usual units relating to Educational Psychology, Child Development, and School and Community. The B.Ed. program is similar in some respects to that for secondary teachers, but an interesting option in the first year for the Junior-Middle School student is the possibility of

electing to take, instead of a second academic subject, junior environmental studies or middle school science. In second year, the students replace one academic subject by an educational studies unit. This pattern continues, and, in addition, all the third term of third year is spent in teaching practice in a middle school.

In America, "add-on" programs assume that a well-prepared elementary or secondary teacher who demonstrates an interest in or commitment to teaching in the middle school can, with some additional education, develop into a well-prepared middle school teacher (George and McEwin, 1978). In general, the candidate spends a quarter or a semester in an intensive combination of on campus study and school-based practicum work. These programs have attempted to spell out the competencies which a well-prepared middle school teacher should possess; design appropriate learning activities; and develop assessment procedures to evaluate the competencies.

Graduate programs at Masters level are also offered in middle school teacher education. These graduate programs offer intensive training in many areas of middle school education, increasing the chances of producing highly qualified leaders in teaching or school administration (George and McEwin, 1978). Each program requires graduate-level study of middle school curriculum, guidance, methods, reading, and early adolescent development. Practicum experiences in middle schools are at the centre of each design, comprising as much as one-third or one-half of the entire Masters work.

In general, it would seem that the development of teacher education programs (both pre-service and in-service) is a logical outcome of any consideration of the special needs and characteristics of early adolescents, together with consequent desirable teacher traits and competencies. In fact, the teacher preparation program for middle school teachers is mainly a reflection of elements of both the primary and secondary programs but with the emphasis on a different age group of learners.

Problems

All is not rosy, however, on the middle school scene, particularly in America. Middle schools are the target, together with secondary schools, for the pervasive scepticism concerning the ability of schools to produce capable citizens (Fox, 1977). In an effort to establish and maintain credibility, middle schools have had to acknowledge their limitations. With the growing pressure and concern in the community for academic accountability, middle schools are feeling the push towards a content orientation (Georgiady, 1977; Klingele and Siebers, 1980). Parents still think that academic excellence is more important than the needs of early adolescents (Handley, 1982), and middle schools are suffering because of this. The current popularity of the "back to the basics" movement is seen by some to contrast with the humanistic approaches of middle school philosophy and curriculum (Klingele and Siebers, 1980).

Some people see the rapid expansion in middle schools as signalling the danger of a bandwagon effect and the possibility of superficiality (Georgiady, 1977). With declining school enrolments, the use in the middle school of redundant secondary teachers is seen as counter-productive to the movement. In addition, there is some criticism that the principles of middle schooling are still neither fully understood nor widely practised. The paucity of large-scale meaningful change has been seen to be due, in part, to a lack of commitment to middle school principles (Arnold, 1982). In fact, some middle schools in America represent a change in name only from the junior high schools (Handley, 1982); they have rejected the inappropriateness of the junior high schools but have not replaced them with anything better. Middle schools in Ohio were found not to have implemented the basic middle school characteristics to a significant degree (Bohlinger, 1981). The problem lies in the fact that many middle schools do not practice the staffing and program patterns that research has shown to be the most appropriate for this age youngster (Henry et al, 1981).

A problem experienced locally (Woodrow, 1982) as well as overseas, involves the lack of formal recognition accorded to the middle school teacher, with the status symbol of gaining a senior class still paramount in our system. The South Australian Education Department also found a lack of teachers deliberately prepared and willing to work with early adolescents at this critical period of their development. Until middle schools have obtained parity within the profession, attracting good teachers will always be a problem (Handley, 1982).

A major problem of team teaching in many middle schools has been the failure to identify specifically and completely those things that team teaching can accomplish

(Williams, 1980). Too often, teaming has been an end in itself. Furthermore, educators have underestimated the complexities of the group dynamics of team teaching.

Non-grading does not yet live up to its full promise either (Williams, 1980). Continuous progress plans are an important goal for the middle school if every child is to have the advantages of his own success-oriented program. However, although middle school staff are using independent study plans, progress through units, frequent rephasing of students, special skills development laboratories, and programmed instructional materials, they report that continuous progress is still only in the developmental stages. It is difficult to avoid an overemphasis on rate of progress rather than on differentiated paths to different goals for individual students. The enormous variability among young adolescents in physical, mental and social growth is infrequently translated into serious proposals for mixed-age grouping (Arnold, 1982).

The problem of the lack of specifically trained teachers has already been delineated (Williams, 1980; Handley, 1982). In addition, principals need to be formally prepared for their important role in the middle school, but to date few in-service programs for principals have been devised.

Conclusion

While there are clearly some obstacles to the effectiveness of middle schools, the overwhelming majority opinion in the literature is that middle schools, when implemented in faithful accordance with their philosophy, represent an excellent response to the particular situation of early adolescents. Traditional structures of primary and secondary schools cannot cater for their special needs and show a blatant disregard for their problems by introducing a major transition in schooling just at the time when students are experiencing the most significant changes in their lives. Approaches adopted in middle schools would seem to provide a solution for this age group, as long as there is commitment by all concerned, consistency in philosophy, and above all, recognition of the special characteristics of this age group.

The literature also points to the fact that developments in teacher education are not keeping pace with the growth of middle school considerations, particularly in America. While there is general agreement on the desirable characteristics of teachers of early adolescents, it seems that much needs to be done to translate these characteristics into reality in teacher education programs. It is only by a continuing emphasis on the suitability and adequate supply of teacher education programs in this area that the needs of early adolescents can best be met.

References

Alexander, W. What has happened to the Middle School?. *NASSP Bulletin*, vol. 55, 1971, pp. 135-141.

Armstrong, D.G. Specialised training for middle school and junior high school teachers: Prescriptions, problems and prospects. *The High School Journal*, vol. 40, 1977, pp. 247-254.

Arnold, J. Rhetoric and reform in middle schools. *Phi Delta Kappan*, vol. 83, 1977, pp. 453-456.

Billings, R.L. Musts for a middle school. *Clearing House*, vol. 49, 1976, pp. 377-379.

Blyth, W.A.L. and Derricott, R. *The Social Significance of Middle Schools*. London: Botsford, 1977.

Board of Teacher Education. *Secondary Schooling and the World of Work*. Brisbane: Board of Teacher Education, 1982.

Bohlinger, T. "The current status of Ohio middle schools - implementation of 18 middle school characteristics". In R.M. Malinka (ed.). *Middle School Research. Selected Studies 1977-1979 Vol. III*. Ohio: National Middle School Association, 1981.

Brinkworth, P.C. *Pre-Service Teacher Education at Sturt College of Advanced Education*. Unpublished paper, Adelaide, 1980a.

Brinkworth, P.C. *Preparation of Teachers for the Middle School Years.* Unpublished paper, Adelaide, 1980b.

Brogdon, R.E. In search of competencies for preparing middle school teachers. *Peabody Journal of Education*, vol. 55, 1978, pp. 145-151.

Brown, W.T. The makings of the middle school: 21 key ingredients. *Principal*, vol. 60, 1981, pp. 18-19.

Bruer, M. *Middle School Programmes in English Teacher Education.* Unpublished paper, London, 1980.

Coleman, J.C. et al. *Youth: Transition to Adulthood.* Chicago: University of Chicago Press, 1974.

Coleman, J.C. *The School Years: Current Issues in the Socialisation of Young People.* London: Methuen, 1979.

Coleman, J.S. et al. *The Adolescent Society: The Social Life of the Teenager and its Impact on Education.* New York: Greenwood, 1981.

Collins, C.W. and Hughes, P.W. *Looking Backward.* Canberra: Schools Commission, 1980.

Collins, C.W. and Hughes, P.W. *Where Junior Secondary Schools are Heading, Australian Education Review, No. 16.* Melbourne: ACER, 1982.

Compton, M.F. "Physical needs of students and the future of the middle school". In P.S. George (ed.). *The Middle School: A Look Ahead.* Ohio: National Middle School Association, 1977, pp. 107-114.

Compton, M.F. *A Source Book for the Middle School.* Georgia: Education Associates, 1978.

Curtis, T.E. Preparing teachers for middle and junior high schools. *NASSP Bulletin*, vol. 56, 1972, p. 364.

Curtis, T.E. "The middle school tomorrow: Three perennial problems". In P.S. George (ed.). *The Middle School: A Look Ahead.* Ohio: National Middle School Association, 1977, pp. 68-75.

Crittenden, B. The identity crisis in secondary education. *Australian Journal of Education*, vol. 25, 1981, pp. 146-165.

Dimmock, C.A.J. and Morgan, T.M. The policy-making processes involved in the introduction of middle schools in the education system of England and Wales. *New Horizons in Education*, No. 66, 1982, pp. 13-21.

Eichhorn, D.H. *The Middle School.* New York: Centre for Applied Resources in Education, 1966.

Eichhorn, D.H. Middle school organisation: a new dimension. *Theory into Practice*, vol. 7, 1968, pp. 111-113.

Eichhorn, D.H. "Middle school learner characteristics: The key to alternative programs". In P.S. George (ed.). *The Middle School: A Look Ahead.* Ohio: National Middle School Association, 1977.

Elkind, D. *Children and Adolescents: Interpretive Essays on Jean Piaget.* New York: Oxford University Press, Second Edition - 1974, Third Edition - 1981.

Epstein, H.T. *The Emerging Adolescent: Characteristics and Educational Implications.* Ohio: National Middle School Association, 1980.

Ervay, S.B. and Wood, D.E. Middle school teacher certification and education: An update. *Clearing House*, vol. 53, 1979, pp. 143-144.

Erb, T.O. *Middle School Research. Selected Studies 1981.* Ohio: National Middle School Association, 1977.

Erikson, E.H. *Identity, Youth and Crisis*. New York: Norton, 1968.

Fielder, R.E. A solution to the middle school problem. *Clearing House*, vol. 51, 1978, pp. 322-326.

Fox, J. "Middle schools: Surviving, refining and growing in the future". In P.S. George (ed.). *The Middle School: A Look Ahead*. Ohio: National Middle School Association, 1977, pp. 15-25.

Friesen, D. The middle school - an institution in search of an identity. *Education Canada*, vol. 14, 1974, pp. 5-9.

Gallina, M.M. and Miller, C.S. Middle schools: An alternative for the transescent. *Adolescence*, vol. 12, 1977, pp. 511-522.

Garvelink, R.H. The anatomy of a good middle school. *Clearing House*, vol. 48, 1973, pp. 100-102.

Gatewood, T.E. and Dilg, C.A. (eds). *The Middle School We Need*. Virginia: Association for Supervision and Curriculum Development, 1975.

Gatewood, T.E. and Mills, R.C. Teacher education's most neglected area: Middle school teacher preparation. *Contemporary Education*, vol. 46, 1975, pp. 253-258.

George, P.S. *The Middle School: A Look Ahead*. Ohio: National Middle School Association, 1977.

George, P.S. and McEwin, C.K. Middle school teacher education: A progress report. *Journal of Teacher Education*, vol. 29, 1978, pp. 13-16.

Georgiady, N.P. and Romano, L.G. Growth characteristics of middle school children: Curriculum implications. *Middle School Journal*, vol. 7, 1977, pp. 12-15, 22-23.

Georgiady, N.P. "The middle school today: Prologue and epilogue". In P.S. George (ed.). *The Middle School: A Look Ahead*. Ohio: National Middle School Association, 1977, pp. 76-92.

Gibson, J.T. The middle school concept: An albatross?. *Journal of Teacher Education*, vol. 29, 1978, pp. 17-19.

Handley, W.H. *Summary of Readings on Advantages and Disadvantages of the Junior School and of the Middle School*. Utah: State Office of Education, 1982.

Henry, M.L., Mitchell, R., O'Connell, W., Schmidt, D.J., Tietz, R.W., Whitten, J. What it's like in the middle. *Principal*, vol. 60, 1981, pp. 26-29.

Husen, T. *The School in Question: A Comparative Study of the School and its Future in Western Society*. London: Oxford University Press, 1979.

James, M.A. Early adolescent ego development. *The High School Journal*, vol. 63, 1980, pp. 244-249.

Johnson, J.H. and Markle, G.C. What research says to the practitioner about teacher behaviour. *Middle School Journal*, vol. 10, 1979, pp. 14-15.

Jones, P. and Garner, A.E. A comparison of middle school teachers' pupil control ideology. *Clearing House*, vol. 51, 1978, pp. 292-294.

Klingele, W.E. and Siebers, R.J. The uncomfortable middle school. *Clearing House*, vol. 53, 1980, pp. 412-414.

Krinsky, J.L. and Pumerantz, P. Middle school teacher preparation programs. *Journal of Teacher Education*, vol. 23, 1972, pp. 468-470.

Lipsitz, J.S. *Growing Up Forgotten*. Lexington: D.C. Heath and Company, 1977.

Lipsitz, J.S. "The age group". In M. Johnson (ed.). *Toward adolescence: The middle school years*. Chicago: National Society for the Study of Education, 1980.

Lipsitz, J.S. Educating the early adolescent. *American Education*, No. 8, 1981, pp. 13-17.

Lounsbury, J.H. "Assuring the continued success of the middle school". In P.S. George (ed.). *The Middle School: A Look Ahead*. Ohio: National Middle School Association, 1977, pp. 151-156.

Lounsbury, J.H. Less is more in middle school scheduling. *Principal*, vol. 60, 1981, pp. 15-17.

McCann, C.K. *The Evaluation of Middle School Programs*. Texas: 1981.

McEwin, C.K. and Thomason, J. *Increasing Effectiveness in Middle Grades Schools. A Study of Developmental Characteristics, Effective Teacher Competencies, Implications for Curriculum and Instruction*. Boone, N.C.: Appalachian State University, 1982.

McGarvey, J. The overlooked basic: The child. *English Journal*, vol. 67, 1978, pp. 72-74.

McGee, J.C. and Blackburn, J.E. Administration of the middle school program. *Theory into Practice*, vol. 18, 1979, pp. 39-44.

Mitchell, J.J. *Human Life: The Early Adolescent Years*. Toronto: Holt, Rinehart and Winston, 1974.

Mitchell, J.J. *Adolescent Psychology*. Toronto: Holt, Rinehart and Winston, 1979.

Moss, T.C. The elementary school principal and the middle school. *National Elementary Principal*, vol. 51, 1971, pp. 36-45.

National Inquiry into Teacher Education. (Chairman: J.J. Auchmuty). Canberra: AGPS, 1980

Nisbet, J.D. and Entwhistle, N.J. *The Transition to Secondary Education*. London: University of London Press, 1969.

Popper, S.M. *The American Middle School*. Waltham, Massachusetts: Blaisdell, 1967.

Power, C. and Cotterell, J. *Changes in Students in the Transition from Primary to Secondary School, ERDC Report No. 27*. Canberra: AGPS, 1981.

Reynolds, J. and Skilbeck, M. *Culture and the Classroom*. London: Open Books, 1976.

Ross, A.M., Razzell, A.G. and Badcock, E.H. *The Curriculum in the Middle Years*. Schools Working Paper No. 55. London: Evans/Methuen, 1975.

Schools Commission. *Schooling for 15 and 16 Year Olds*. Canberra: Schools Commission, 1980

Smith A. Piaget's model of child development. *Clearing House*, vol. 55, 1981, pp. 24-27.

Sommer, B.B. *Puberty and Adolescence*. London: Oxford University Press, 1978.

South Australian Committee of Inquiry into Education (Chairman: J.P. Keeves). *Education and Change in South Australia*. Adelaide, 1981.

Tanner, J.M. "Sequence, tempo and individual variations in growth and development of boys and girls aged 12 to 16". In J. Kagan and R. Coles (eds). *Twelve to Sixteen: Early Adolescence*. New York: W.W. Norton, 1972, pp. 1-24.

Taylor, M. and Garson, Y. *Schooling in the Middle Years*. Stoke-on-Trent: Trentham, 1982.

Tegarden, R.S. Implications of the middle school for elementary, secondary education. *Principal*, vol. 58, August 1979.

Thompson, L. Benchmarks for the middle school. *Theory into Practice*, vol. 15, 1976, pp. 153-155.

Thornburg, H.D. Early adolescence. *The High School Journal*, vol. 63, 1980a, pp. 215-221.

Thornburg, H.D. "Can the middle school adapt to the needs of its students?". In E.N. Brazee and J.H. Swaim (eds). *The Emerging Adolescent: Characteristics and Educational Implications*. Ohio: National Middle School Association, 1980b.

Toepfer, C.F. Brain growth periodisation data: some suggestions for re-thinking middle grades education. *The High School Journal*, vol. 63, 1980, pp. 222-227.

Vars, G.F. "Emphasising student involvement: A key to the future". In P.S. George (ed.). *The Middle School: A Look Ahead*. Ohio: National Middle School Association, 1977, pp. 130-145.

Wall, R. Middle schools take root. *Principal*, vol. 60, 1981, pp. 8-10.

Wiles, J. and Bondi, J. *The Essential Middle School*. Ohio: Merrill, 1981.

Williams, E. *The Middle School Movement*. Kit on Washington Township Middle Schools, 1980.

Woodrow, D. *The Organisation of the Middle School at St Peter's College*. Unpublished paper. Brisbane, 1982.

Wright, A.F. and Headlam, F. *Youth Needs and Public Policies*. Melbourne: ACER, 1976.

MEETING THE NEEDS OF CHILDREN IN THE EARLY ADOLESCENT YEARS

Colin Power,
Flinders University of South Australia

Introduction

In addressing this seminar, I have been asked to consider the special needs of early adolescents and to discuss how schools might respond to those needs. To place my contribution in context, I will begin by clarifying what I mean by educational needs and early adolescence.

Educational Needs

By *education* we generally mean the systematic development of a person's understanding of the natural world and the human condition. The unique contribution of schooling to this development is largely cognitive, but not narrowly so, for in being educated, a person's attitudes, emotions, aspirations and actions are transformed and regulated in ways valued in a given society.

By *needs* we generally mean the lack of something which, if present, would enable an individual to live and function at what is regarded as a satisfactory level. Thus individuals in our society are said to "need" to develop a *knowledge* of their natural social and politico-economic world because we value truth, they "need" to develop social awareness because we value *respect for persons*, they "need" to be equipped to choose adult roles and occupations which provide for individual self-fulfilment and dignity because we value *individual autonomy*; they "need" to engage in physical activity and to acquire musical and artistic skills and sensitivities because we value *culture* and *physical achievement*.

Our assessments of the degree to which schools and teachers "meet the needs" of students at any particular level or of any given type depend ultimately on what we *value*. Where schools, teachers and students meet our value-laden expectations as to what represents a satisfactory level of performance, we are satisfied. Where they do not, we agitate for reform.

Surveys of community e pectations of schooling suggest that there is a high degree of consensus amongst teachers, parents, students and employers. Highest priority is assigned to the basic skills of reading, writing and mathematics. We also expect schools to contribute to personal and social development. There are, however, variations in the priority assigned to the so-called academic and vocational subjects. Whereas many students and employers believe too much emphasis is given to the former and not enough to the latter, educators generally assign lower priority to vocational needs (Baumgart and Power, 1983).

The review of the literature provided by the Board contains a number of criticisms of schools as they are presently structured and mounts a case for an alternative structure (middle schools) and consequential changes in teacher education programs. It, like the assessments of schooling contained in surveys of community expectations, rests on a set of values, of assumptions about what schools ought to be like if they are to foster the balanced and continuous development of 11 to 15 year olds. In this seminar, we are being asked as well to make judgments about the adequacy of existing structures, programs and practices in schools and teacher education programs. In so doing, we must e amine the values underlying our judgments and the evidence regarding the processes and outcomes of schooling.

The Early Adolescent Phase

Human development is variable, it is a continuous process, and it can be facilitated or inhibited depending on conditions in the home, school and society. Throughout history, men have speculated about the existence of stages in human development, their distinguishing characteristics and social significance.

As a distinct stage in the human life cycle, adolescence is a relative newcomer. As a consequence of advances in nutrition and the industrial revolution, a stage of life that barely existed a century ago began to emerge, as the gap between the onset of pubescence and the assumption of the full responsibilities of adult life began to widen. By the end of the century, school systems were established to prepare the masses for

the new forms of work. Considerable concern was expressed too about the "problem" of those past puberty but not adult who were labelled as "street gang" delinquents. It was within this context that G. Stanley Hall in his monumental work on adolescence helped establish both the concept and the notion that adolescence is a period of upheaval, turbulence and rebellion.

During the century the period between the onset of puberty and full participation in the workforce has continued to increase. As the society changes, new pressures, demands, expectations and constraints are being placed on adolescents. A distinction is now being made between "transescents" aged 11-15 and youth aged 16-19, in part because of their biological characteristics and in part because we compel the former to go to school while the latter have a number of options open to them in education and adult life.

The Educational Needs of Early Adolescents

The basic educational, social and personal needs of young adolescents are no different from those of other human beings. In a society like ours, all members must acquire the knowledge, skills and beliefs necessary to maintain production, order and to enable them to live with dignity and purpose in a democratic, technological society. All "need" to achieve, to feel they belong and to act autonomously yet responsibly. Yet there are, as the Board's review indicates, some "needs" which assume particular significance in this period and must be taken into account.

Clearly the most striking change occurring in the 11-15 year old period is the *onset of puberty*, including a marked spurt in growth and the development of reproductive capability. This can be seen in the velocity of average weight growth in boys and girls. Equally dramatic is the variability in the development of secondary sexual characteristics. For example, it is not uncommon to find 11 year old girls with complete development and 15 year old boys with no secondary sexual characteristics. This pubertal variance has important social and emotional ramifications. Late maturing boys and girls tend to have negative self-concepts, feelings of inadequacy, being rejected and prolonged dependency needs (Eichhorn, 1980). Yet we classify and treat 11-15 year olds by chronological age, ignoring their developmental age.

If young people developed in a social vacuum, these physical changes would matter little. In our culture however, they herald changes in relations with adults, new interests, attitudes and expectations which impact on the association between young adolescents and the school. Of the developmental tasks such changes bring, that of greatest theoretical interest has been *"identity formation"*. Of the eight psychosocial crises extending through an individual's life span postulated by Erikson (1968), the search for identity is believed to become especially acute during adolescence. In Hall's view, this search is a particularly stressful one, one which according to Coleman (1961) is characterised by intergenerational conflicts, formation of peer group attachments and relations with the opposite sex. But the weight of evidence suggests that the extent of stress, desatellisation, and conflict have been greatly exaggerated. The search for identity and the formation of new attachments during early adolescence turns out to be relatively peaceful and tension-free. Most young adolescents seem to get on well with adults, the opposite sex, to cope with the demands of school, to adjust to their social environment, to display fairly stable self-images, and to be largely in agreement with their parents so far as social, moral, educational, political and religious values are concerned. Conflicts between generations appear to centre around rather mundane issues of dress, hair style, tidiness and punctuality rather than fundamental values.

Of course, as at any age, there are tensions and challenges which create crises in the lives of some young adolescents resulting in *alienation* either of the self or from society. The young adolescent's adjustment to the demands of the school is not independent of circumstances in the home, demands of peers, images created by the media and the like. While young people from stable homes which both value and take an active interest in what they are doing at school tend to enjoy school, to achieve well and continue to develop, others are less fortunate and may begin to drift into adolescent and adult life-styles which clash with the social and academic demands of the education system. In my own research, I have been particularly interested in the development of sub-cultures in the 11-15 year old period, that is, of adolescent life-styles which derive identification from class and gender-based attempts to resolve contradictions between school and other environments - particularly the peer group and the family. For some young adolescents, adjusting to the demands of teachers and

courses in primary and (more particularly) secondary school is difficult - leading to withdrawal, rebellion or excessive dependency. Failure and conflicts with authority in what becomes an increasingly alien institution becomes the norm for young adolescents in the anti-school sub-culture. It is this group rather than all young adolescents whose educational, social and personal needs are not adequately met within the existing structure.

So far as *cognitive development* of young adolescents is concerned, much educational rhetoric and practice seem to be based on the assumption that young adolescents are in the transition between a concrete and formal stage of cognitive operations. While Epstein's work on brain growth periodisation suggests a plateau in middle school years, we should, I believe, be wary both of the wide extrapolations from Piagetian stage theory and this research which have been bandied around. Rather the evidence gives credence to the position that the apparent age-related structures of thinking are as much linked to the complexity of the task, familiarity with its content and previous learning of students as any biologically-determined maturation process. Most of the learning difficulties and frustrations I have observed in young adolescents in the transition between primary and secondary school have more to do with discontinuities in the curriculum, the underestimation of the experience and capacity for rational thinking on the one hand and the failure to provide appropriate examples, enough practice and experience in developing concepts and skills on the other. Where primary and secondary schools have sorted out their learning priorities, assessed where students are, and systematically gone about the task of creating well-organised structures of knowledge for making sense of the rational and social world and tackling problems, intellectual development proceeds smoothly for the majority of young adolescents.

The varying styles of *leisure sub-cultures* offer adolescents a collective solution to the problems posed by shared contradictions among individual purposes and the demands of the school, the peer group and the family. For the young adolescent, affiliation with friendship groups, football clubs, gangs, pop groups as well as leisure pursuits ranging from discos to computer programming provide a social and symbolic context for the development and reinforcement of collective identity and individual self-esteem.

In early adolescence there appears to be a natural expansion from family and teacher relationships to affiliation into *peer groups* or gangs. The peer group becomes particularly important in establishing a viable social identity and as a confirming experience in the transition to their new identity as adolescents. Close friends serve especially to confirm crucial but tentative personal beliefs and to validate each others' views. Almost paradoxically, however, my case studies of young adolescents include evidence of personal loneliness and the fragility of personal relationships among some adolescents, including those characterised by their peers as "tough". This means that acceptance by one's peers generally and especially having one or more close friends may be of crucial importance in a young person's life.

Finally, Coleman's (1978) focal theory postulates that at different ages, particular personal, social and work issues (e.g. independence, conflict with parents, failure at school) come into focus for individual adolescents, and they cope by dealing with one issue at a time. For the majority of young adolescents, the strategy appears to work fairly well. Most adjust to the physical changes, the demands of high school, the search for identity and so on, and grow into responsible, productive adults. For a minority, however, issues frequently overlap, demands are contradictory and lie beyond their capacity to meet. For them, adolescence, and all too often life as a whole, is a period of "storm and stress" not one of growth.

Schools and The Needs of Young Adolescents

At the school level, it seems that schools are growth-promoting when their cognitive demands and social environments are congruent with the learning, social and independence needs of their clients. Under these conditions, students are likely to display high levels of satisfaction, self-esteem, participation and achievement. Mismatches, on the other hand, inhibit development and provoke dissatisfaction.

In studying the degree to which schools meet the developmental needs of young adolescents, I (Power and Cotterell, 1979) adopted a matching model in which the nature of the primary and secondary school environment, the developing person and patterns of behaviour (satisfaction, achievement, etc.) were assessed.

In our culture, the operation of primary and secondary schools is shaped by an implicit definition of the functions of primary and secondary school in society. These differences are enshrined in the way in which teaching is organised, the curriculum and assessment practices.

Compared with secondary schools, the typical primary school was seen by pupils to be more involving and structured. In particular, primary classrooms were seen as:

(a) having a richer physical environment;

(b) being less disorganised and more goal directed;

(c) being less cliquish, with less favouritism and more cohesion;

(d) demanding less speed and creating more opportunities for independent inquiry.

In addition, there were important differences in the curriculum with evidence of unintentional overlap, discontinuities, changes in terminology and approach. These differences in time generated important shifts in pupil satisfaction with aspects of school life, self-confidence and attitudes to school subjects.

When viewed across time, the changes in student satisfaction and attitudes display an interesting pattern of gains and losses.

The overall level of student satisfaction with school changes during the last year of primary school (Grade 7) and the first year of secondary school (Grade 8). Throughout the transition period, students, on the average, maintain a moderately positive orientation towards school. Satisfaction rises during the last year of primary school, peaks early in the first year of secondary, and thereafter declines. Whereas the data support the observation of Grade 8 teachers that as the year progresses "the rot begins to set in", it should be noted that the magnitude of the decline in satisfaction is small (approximately 0.2 standard deviations).

Changes in the four components of overall student satisfaction can also be examined. General school satisfaction combines enjoyment with school and liking for teachers. The data show that students begin each new year with a high level of general satisfaction, but as the year wears on, the liking for teachers and their enjoyment of school evaporate. Students as a whole become somewhat more apathetic about school.

The results for confidence are interesting: the data show a regular growth of confidence (i.e. a decrease in school-related anxieties) during Grade 7 and early in Grade 8, followed by a plateau. The growth in confidence in Grade 7 is undoubtedly associated with a number of factors: the status of being at the top of the primary school, greater physical and social maturity, and the extent to which Grade 7 represents a year of consolidation and review. It is interesting to find that after only one month of going to high school, we discover little evidence of widespread transfer traumas, but rather a significant increase in student confidence. The experience of facing the challenges of the new environment and meeting these without a great deal of external support seems to have the effect of promoting self-confidence and lowering fear of failure in the cohort as a whole. Moreover, there is no evidence of a decline in confidence during the remainder of the year.

A small but transitory increase in work satisfaction (satisfaction with progress, capacity to keep up) is associated with transfer to high school. No significant changes in social satisfaction (arising out of feelings of belonging, of being accepted by other students) were detected.

Data relating to changes in student attitudes to primary and secondary teachers, and student ratings of the usefulness and clarity vs. difficulty of schoolwork were gathered. The data show that towards the end of Grade 7 and early in Grade 8, the image of high school teachers improves remarkably (by about one standard deviation). It would seem that more accurate and favourable information about high school teachers becomes available to most Grade 7 students during the Grade 7 year. The data indicate that these expectations are confirmed on transfer to high school. As the year progresses, student attitudes towards their teachers decline a little, but remain generally positive.

The data show marked changes in student ratings of the usefulness-relevance and the clarity-difficulty of schoolwork. Both increase steadily during Grade 7 and early in Grade 8 and drop dramatically during Grade 8. That students should begin to view

their school subjects as more and more useless and irrelevant to their needs suggests a mismatch of major proportions between the curriculum of the high school and the student body, a mismatch unlikely to be developmentally desirable. Similarly, the dramatic shifts in student ratings of clarity (easy-difficult; clear-confusing) may have unfortunate consequences. It seems likely that in the middle of the transition period, the learning environment created by primary and secondary schools is seen by pupils as being high in clarity and low in difficulty, and hence may lack the challenge needed by the bright. On the other hand, early in Grade 7 and late in Grade 8, the work is seen to be more difficult and confusing so that the less able may have serious difficulty in coping with schoolwork.

Changes in student attitudes towards different school subjects can also be examined. We noted earlier that there were major discontinuities for English, Social Studies and Mathematics, but not in Science. Attitudes to Social Studies show a downward trend which accelerates progressively so that by the end of Grade 8, Social Studies stands alone as the one subject towards which the majority of students express an unfavourable attitude. The data imply that there is an urgent need to rethink the teaching of Social Studies, History and Geography in Grade 8.

The primary-secondary transition study suggests that the environments radiated at primary school seem more appropriate for *dependent, conscientious* students matching their level of cognitive and personality development with opportunities to participate and belong but lacking the challenge and scope for independence needed by the more talented and mature young adolescents. The typical secondary environment seems more appropriate for students who are *able, emotionally mature* and *self-sufficient*, matching their level of cognitive and personality development with pressure to perform, to explore options and to assume a measure of responsibility for their work.

In a recent study of changes in student satisfaction with secondary school in South Australia, I (Power, 1983) found that dissatisfaction with school peaks in Year 9 and is particularly pronounced among boys coming from homes with a lower socio-educational level.

The data, together with case studies of individual schools and pupils, suggest that the demands made by many former academic high schools and subject-oriented teachers lead to conflict and withdrawal early in secondary school and to the development of an anti-school sub-culture amongst those students who begin to recognise they are caught in a no-win situation in the competition for grades and status in an academically-oriented secondary school. The evidence shows that some secondary schools are slowly but surely adopting policies, curricula and strategies which give greater recognition to the status, identity, achievement, independence and social needs of the broader range of young adolescents now in secondary school - but that there is still a long way to go. For the most part, secondary schools are still better equipped to meet the needs of the "brains", the "academics" in the school than the needs of the "toughs", "non-academics" and the "sheep". I should note in passing that the growth of the anti-school sub-culture was much more pronounced in large, bureaucratic, subject-oriented, impersonal high schools, and less pronounced in schools in which teachers particularly skilled and committed to working with young adolescents were given the opportunity to create structures and programs designed to meet their needs in transition sub-schools *and* were given recognition, support and even status for their contribution by the administration and senior subject staff.

Teachers and The Needs of Young Adolescents

This leads me then to ask, which needs of which young adolescents are and are not being adequately met by schools, and why? Part of the answer lies in the relations established between the teachers and young adolescents.

In my studies of young adolescents, I examined what happens in classrooms and schools to a number of sub-groups of students. In a study of Grade 8 science classrooms I (Power, 1973) found that the subject-oriented teaching style employed facilitated the achievement, social status and satisfaction of *bright, achievement-oriented* youngsters. They received the greatest attention, encouragement and the most detailed feedback from the teacher. The needs of *person-oriented girls, dependent* and *less-able, reluctant* learners were less well met. The person-oriented girls were criticised and learned science was not for them; the dependent students were rejected by

by teachers and peers; and the reluctant were labelled as dumb or as trouble makers and treated accordingly.

The Good-Power model indicates that "good" teachers, (those who communicate clearly and who care for all their pupils) develop strategies which cater for, and balance out the social and academic needs of these various groups, while "slack" and "mean" teachers adopt less than optimal coping strategies, strategies which fail to meet the needs of one or more groups in the classroom. Young adolescents have a particularly keen sense of justice and of human rights. Thus a really "mean" teacher is one who pushes you around, pulls your hair and degrades you in front of others using words you can't understand, doesn't help you, goes too fast, is interested only in the matrics.

My research suggests that most upper primary and lower secondary teachers see young adolescents as a distinctive group with particular development characteristics. At the upper primary level, there was a higher degree of mutual dependence and personalised identification between the class teacher and pupils. While Grade 7 teachers adapted the curriculum activities and pace continuously, they generally assumed that Grade 7 pupils are "still not very mature". Accordingly, a premium was placed on involving children actively in highly structured, teacher-assigned tasks. The assumption seemed to be that Grade 7 pupils "need" a defined, consistent environment with a limited amount of challenge, choice and feeedom to act independently. In some cases, teachers seemed too eager to provide a safe, non-threatening, unpressured and undemanding environment, unintentionally reinforcing dependency and thwarting attempts by more independent youngsters to assume responsibility for their own actions.

Grade 8 teachers adopted a wider diversity of approaches - most adopted a fairly standard, traditional pattern of teaching which represented a "safe" way of dealing with what are seen to be cheerful, effervescent and immature young adolescents; others welcomed the freshness of their new charges and attempted to provide varied and interesting lessons within a control structure which guided and supported student involvement. Many Grade 8 teachers confessed they were uncertain as to how best to deal with young adolescents, given the constraints of the typical high school situation.

The "slack" teacher is one who lacks the skill and motivation to effectively manage the class and to foster learning. Even the "toughs" in our study distinguished between "good" and "poor" teachers. Generally they were prepared to co-operate with the former, while "mucking up", "resisting" or "opting out" with the latter.

It seems quite clear that good interpersonal relations and good teaching are created by good teachers, that is, teachers who are well-educated, particularly knowledgeable about and interested in the subjects and pupils they teach, committed to the enrichment and development of human minds and lives, and skilful in the art of fostering enthusiasm, communicating ideas and helping young people. Excellence in teaching can hardly be expected of someone who has an anaemic understanding of the subject matter to be taught, inadequate management and communication skills and insensitivity to the needs, aspirations and circumstances of those being taught. There is no royal path to improving the capacity of schools to meet the needs of young adolescents which does not include provision for the extension and refinement of the teacher's professional expertise, clinical judgment, and interpersonal skills. Above all, situations must be created in pre-service programs and schools where mutual respect and trust can develop among teachers and students if both their needs are to be met. My own teaching of science to young adolescents in deprived areas was ineffective until I learned how to create situations which matched their particular interests and abilities rather than forcing them to cope with the demands of an external syllabus designed as a formal introduction to the scientific disciplines.

Most teachers believe that there ought to be continuity in the educational experience of children as they move from one grade to the next. As a consequence, teachers are most concerned about what they see to be the adverse effects of the discontinuities in the experience of children in transition. Moreover, they have very clear ideas about what needs to be done to "bridge the gap". But evidence of the communication and co-operative planning they advocate is difficult to find. We are forced then, to ask why the ideals espoused so often have proved so difficult to put into effect.

The data indicate that attempts to create optimising environments at each level, and to smooth transitions between them, are frustrated by external and internal constraints. The nested structure of relationships between the socio-political system, the school system, schools, and classrooms is such that external frames restrict and

govern what can and does happen inside classrooms (particularly in high schools). Thus there was, in fact, relatively little variation in the learning environment of classrooms sampled at each level of schooling. It would seem that the forces which give direction, purpose and identity to schools within each sub-system, also create barriers to reform. Teachers at both levels, felt that outside forces made the discontinuities between primary and secondary school more or less inevitable. The data indicate that external factors make it difficult to establish and maintain effective working relationships between primary and secondary schools.

Towards Making Schools More Suited to Adolescent Needs

In order to promote the development of children, new experiences and changes in environments are necessary. By dividing schooling into stages, we have ended up with an environmental design which creates an abrupt change at the point of transfer to high school. We have seen that most children adapt quickly and readily to the change and that some blossom as a result. For some, however, the changes are abrupt and overwhelming, creating unnecessary stress, and inhibiting development. To a large degree, the problems identified in this study are an artifact of long-standing assumptions about human development and schooling, and of the organisational structures which have emerged as a result. The data suggest that the existing *organisational structure* creates problems for those least well-equipped to accommodate to the demands of high school. Moreover, the present structure also tends to isolate primary school teachers from secondary school teachers, thereby militating against efforts to bridge the gap.

To the degree that the weaknesses of the present structure are acknowledged new forms of organisation become a possibility. While we cannot predict what these new forms may be, it is appropriate to examine some alternatives which have been tried elsewhere, before we turn to the problem of attempting to remedy the weaknesses in the existing structure.

In Sweden, children attend the one school, the Swedish Comprehensive School (Grundskola), for the nine years of compulsory schooling. Transition is thus delayed until age 17, corresponding to Grade 10 in Sweden. At this point, students may transfer to one of three types of secondary school, or leave school. Such an administrative structure delays any abrupt change in schooling until after the period of compulsory schooling, thereby avoiding the stresses associated with transfer, the curriculum discontinuities, and the barriers between primary and lower secondary teachers. At the same time, the practice of retaining all children in the same institution until age 17 may create its own problems if the environment created lacks the variety and opportunity for new experiences needed by young adolescents to maximise their development.

Another alternative is to set up schools designed specifically to meet the needs of the young adolescent. The junior high schools of the United States and the middle school movement are examples of attempts to create organisational structures uniquely fitted to the needs of the in-between age group. The first junior high school was established in 1909 in Columbus, Ohio. By the mid-1960s, there were over 8,000 such schools. The junior high school grew out of the failures of the high school (with its formal program and methods) to cope with the demands for vocational and citizenship education for young adolescents, and the idea that young adolescents had unique characteristics and needs. However, the junior high school has not been without its problems. Its critics claim that its structure and programs tend to be literally a junior version of high school, a pale reflection of what early adolescents have to look forward to, rather than an appropriate environment for the way they are now. The alleged failure of the junior high school to achieve its goals has led to advocacy of a 4-4-4 structure (instead of the 6-3-3 pattern) and to the establishment of yet another type of institution, the middle school. Advocates of the middle school argue for a school which focuses on the needs of 11-14 year olds, "a school for growing up", a school program based on the study of the physical, intellectual, social and emotional development of the "between-ager" (Alexander, 1971). The movement has been moderately successful, insofar that many middle schools have been established and the junior high school seems to be on the way out. The establishment of new types of institutions may make it possible for teachers and administrators to design more appropriate environments for young adolescents. But no organisational structure can avert all problems. The creation of middle schools as separate institutions may bring in their wake new types of transition problems.

While one may speculate on the merits and demerits of alternative types of institution, for most Australian teachers and children, solutions to the transition problem must be found within the existing framework. To a greater or less extent, each primary and secondary school in this study modified its organisational structure in order to remedy difficulties created by this framework. For the most part, the adjustments made by primary schools were minor, and tended to take the form of responses to requests for information and co-operation from a high school. On the other hand, all high schools had some form of induction program, a pastoral care system, and a few have established a Grade 8 centre. That most of the organisational initiatives have come from high schools indicates that administrators view the problem as one of the socialisation of youngsters into high school life. But primary administrators at the school, regional and systems level, as well as their secondary counterparts, have a vital role to play in ensuring that schools are rich in opportunities for participation, learning and growth.

Of the 400 Victorian high schools recently surveyed by Evans (1978), approximately one-fifth had reduced the overall school structure to a series of smaller *sub-units* or *centres*, one of which was designed to cater for first-year students. Each centre operated as a semi-autonomous administrative unit with its own staff, programs, facilities and identity. Two of the high schools in our sample established such a centre. In one case, an open-area unit had been established in a regular high school to cater for half of the Grade 8s. In the other instance, we were able to observe at first hand how the principal and staff of a recently-established open-area school resolved policy issues and confronted the obstacles to innovation which are endemic in bureaucracies. The data indicate that the efforts of the administrators and teachers involved in the planning and operation of such centres paid off. Classes in the Grade 8 centres in this study were perceived to be richer, better organised, and more cohesive, involving and satisfying than those in other high schools. It would seem, therefore, that breaking down the monolithic structure of the high school into smaller, more flexible and more functional units is a step in the right direction. The establishment of a Grade 8 centre, unit or sub-school creates new possibilities for vitality and growth for both students and teachers.

Modifications in the organisational structure of schools (especially large schools) are a necessary, but not a sufficient, condition for success. Changes in organisational arrangements must go hand in hand with the formulation of a *comprehensive school* policy for the education of young adolescents, and for evoking a sense of belonging to, and being needed by, the school. Successful organisational innovations in our sample took place in schools in which the principal was seen to be an effective professional leader, and the proposed structure had the support and goodwill of the staff as a whole. In addition, the successful schools seemed to have a sense of mission, an identity, and a wholeness which pervaded every aspect of their functioning. In such schools, induction programs, pastoral care systems and Grade 8 centres, along with other features of school life, formed part of a hidden curriculum whereby the school conveyed the message that it cares about its students, their education and well-being. The least successful primary and secondary schools tended to be large, formal, organisations which were lacking in direction, cohesiveness and flexibility.

The organisational environment created by the *administration* of some larger schools could possibly be made more enabling and stimulating in its function than the generally neutral influence of the administration on students in transition suggests. In the least successful schools, the policies of the administration in allocating sporting equipment, teachers, rooms and other facilities discriminated against Grade 8s. In the most successful of the larger high schools, the administration organised meetings with Grade 7 teachers and students prior to Grade 8; a pastoral care program (which included a training program for teachers and which led to teacher involvement beyond the allotted four periods a week); and a one-week camp for all Grade 8 classes, their teachers and older students who had volunteered to help. The administration of successful schools also sought information from primary teachers about pupils who needed special attention; visited the primary schools to meet with Grade 7 students and their teachers; arranged meetings for parents; and enrolled as many students as possible before the start of the year. Class groups were finalised before the year began so that Grade 8s were quickly put into permanent rooms, given timetables and met with their new teachers. Given the problems created by, and the perceived level of disorganisation in high schools, there is much to be gained by making an ordered start. The data also indicate that it is crucial that teachers of Grade 8 classes be carefully selected, attention being given to their commitment to teaching young adolescents, and willingness to devote time and effort to working with them.

While primary and secondary schools must be reconstructed one by one if they are to become optimising environments, the problem of *co-ordination* between schools and systems must still be faced. The concept of co-ordination embodies notions of unity and continuity. The idea of co-ordination as unity implies a consideration of the total situation in which all the facets of the transition problem are considered by all the people (primary and secondary teachers, pupils, parents) concerned.

At the organisational level, the idea of co-ordination as a continuing process suggests the need to provide the machinery and the support for on-going co-ordination, not just ad hoc problem-solving mechanisms. Continuous co-ordination affords greater incentive to look for underlying patterns in the surface manifestations of transition problems, and to develop problem-solving strategies at the systems, regional and school level.

On the basis of the experience and evidence gained in this study, it would appear that more needs to be done by administrators to stimulate debate on appropriate ends and means of educating young adolescents; to ensure that parents have access to the type of information they need to help them choose the type of school environment most likely to match the developmental needs of their child; to create opportunities for primary and secondary teachers, students-in-transition and their parents to inter-change experiences and ideas about transition; and to establish the machinery needed to build bridges and to locate and erase organisational constraints which generate discontinuities and communication barriers.

A major thrust in any attempt to resolve the transition problem must be directed towards increasing understanding and eliminating suspicion and hostility between the two levels of schooling. Frequent and regular contact needs to be established between each high school and its feeder schools. Meetings can be arranged to exchange information on school philosophies, organisation, curriculum, expectations and policies. Arrangements can be made for Grade 7 and 8 teachers to visit one another in their schools and work with one another in their respective classrooms. There is much to be gained by teaching in another kind of school.

Conclusion

Young adolescents need help to grow by having a consistency and continuity in their educational experience; they need to belong - to form attachments and commitments to a group; they need to be recognised as individuals with rights and an identity; and they need to be given the opportunity to explore options and to experience success.

In a world which has forgotten the young adolescent, shut them out of the world of adults, particularly the world of meaningful productive activity and decison-making affecting their lives, an increasing number see school as irrelevant to their needs, as an institution set up and run by adults to contain them as they mark time. Yet some schools have been able to create spaces and small units with a sense of mission. They are providing an education which is liberal - liberating and expanding not only minds but lives in an atmosphere of respect and trust. These are schools in which the young adolescents are not the "worms" and the teachers committed to working with them are afforded high status. It is the combination of caring and systematic expansion of minds and young lives which I believe will prove of far greater value in our uncertain world than the current tendency to divide young adolescents into "academics" and "non-academics" and prepare them for mental and manual work as we currently know it.

To a large degree, the "needs" which are beginning to assume importance for young adolescents arise out of the denial of human rights. Changes in the past century have meant that adolescents today are denied the right to work, to engage in the processes of production, to participate in decisions affecting their lives, and to freely choose roles and activities which provide for self-fulfilment, and to act independently. All too often, we assume adolescents are incompetent and untrustworthy; our over-protective structuring of their lives in the years of compulsory schooling may inhibit rather than promote growth.

It would seem to me particularly important for all teachers to understand the way in which societal changes have created a new phase in the human life cycle and the creation of institutionalised means of keeping adolescents out of the concerns of adult life. All teachers, and particularly those who work at upper primary and secondary level, need to be helped to understand the nature of the environmental demands and constraints placed on young adolescents as they move from primary to secondary

school and from childhood towards adulthood, to understand their particular needs and the changes in curriculum, teaching and interpersonal relations necessary to ensure these needs are met.

References

Alexander, W.M. Guidelines for the middle schools we need now. *National Elementary Principal*, vol. 51, 1971, pp. 78-89.

Baumgart, N. and Power, C.N. Grading schools - what do we expect and how do they rate? Paper presented at Australian College of Education Annual Conference, Sydney, May 1983.

Coleman, J. *The Adolescent Society*. New York: The Free Press, 1961.

Coleman, J. Current contradictions in adolescent theory. *Journal of Youth and Adolescence*, vol. 7, 1978, pp. 1-11.

Eichhorn, D.H. The school. In M. Johnson (ed.) *Toward Adolescence: the Middle School Years*. 79th NSSE Yearbook Pt 1. Chicago: University of Chicago Press, 1980.

Erikson, E.H. *Identity, Youth and Crisis*. New York: Norton, 1968.

Epstein, H.T. and Toepfer, C.F. A neuroscience basis for reorganising middle grades education. *Educational Leadership*, vol. 35, 1978, pp. 656-660.

Evans, M.J. Some aspects of school procedures in primary to post-primary school transition. Burwood State College, Victoria, 1978.

Power, C. The unintentional consequences of science teaching. *Journal of Research in Science Teaching*, vol. 10, 1973, pp. 331-339.

Power, C. *Satisfaction with High School*. Report to ERDC. Adelaide: Flinders University, 1983.

Power, C. and Cotterell, J. *Students in Transition*. Report to ERDC. Adelaide: Flinders University, 1979.

DISCUSSION FOLLOWING POWER'S PAPER

Following Professor Power's address, seminar participants were invited to put comments and questions to a panel consisting of:

Bob Rasmussen, Principal, Warwick State High School

Don Rostedt, Principal, Macgregor State High School

David Woodrow, Senior Master, St Peter's Lutheran College.

Colin Power also reacted to audience comments.

As part of this discussion, the school personnel were able to describe some of the initiatives which they had undertaken at their schools to meet the needs of early adolescents. These comments are given below. They are followed by a summary of the points raised during general discussion.

David Woodrow's comments

David Woodrow commented on the situation at St Peter's College, a co-educational day and boarding school at Indooroopilly for Years 1 to 12, which, he stated, provided an ideal situation to explore different structures. About 1200 students were enrolled in the school and it currently was divided into three separate semi-autonomous units - the primary school for Years 1 to 6, the middle school for Years 7 and 8 (the last year in primary and first in secondary), and the upper school, Years 9 to 12. The school was in the process of dividing the upper school into a junior high school (Years 9 and 10) and a senior high school (Years 11 and 12).

The problem, in 1976, was that the school was becoming too large and personal contact had been lost with students, particularly with the younger students in the secondary area. Problems were occurring which should have been detected at early stages but which were not discovered. There was also the problem of the discontinuity between primary and secondary school. To overcome these problems, it was decided to set up a middle school with three aims: firstly, to provide pastoral care and to try and re-establish personal contact; secondly, to bridge the gap between primary and secondary school; and thirdly, to provide an administrative convenience.

A school of 1200 was a fairly big and bureaucratic organisation which could upset students, certainly those at the lower level. At St Peter's, the structure was such that it was possible to allocate a separate building to the middle school, with its own head and clerical assistants. The middle school acted as a semi-autonomous unit with its own assemblies where the students related to their class teachers and to the head of the middle school, rather than to the headmaster of the whole school.

It was attempted to achieve a balance between male and female teachers and between the younger enthusiasts and the more mature, experienced teachers. The middle school teachers had their own staff room in the middle school, and they taught primarily in the middle school. It was envisaged that there would be problems with teachers who saw teaching senior classes as a status symbol, but there was no trouble because many teachers felt that they were more suited for the middle school. Those teachers taught primarily in the middle school; class teachers all took more than one subject. Thus, class teachers saw their classes at Year 8 level for three times every day: at the class assemblies and in two other subject periods. The students then had to relate to only four or five teachers altogether in Year 8. The class teachers had the additional role of personal responsibility to the students. They had increased contact with the students and they were also responsible for liaison with parents, so that an attempt was made to re-establish parent/student/teacher contact. Regular staff meetings in the middle school, and the work of the student counsellor allowed for the early detection of problems.

The class teachers were, in fact, the secret to the whole of the middle school operation. If class teachers were not committed to the ideal of being personally responsible for students and did not take the job seriously, then the middle school concept would surely not succeed. St Peter's College was very fortunate in having class teachers who fitted that mould exactly and who took their responsibilities seriously.

As far as the curriculum was concerned, there was little change. Activity-based courses had been introduced many years prior to the setting-up of the middle school.

The Year 7 classes had their own teachers, but they had senior teachers for about four different areas - art, music, scripture, physical education - so they had contact with the senior school teachers. Year 8s were restricted to four or five teachers altogether.

With respect to teaching methods, one fact that came out very early was that the worst teachers in the middle school were those senior teachers who had to pick up another five periods to fill their timetable, and the teachers who used senior teaching methods in the middle school.

Research was undertaken with parents, teachers and students, and it was found that there had been success in the three areas of improved contact, in bridging of the gap between primary and secondary school, and in the administrative arrangements.

There were some problems which arose from the introduction of the middle school. Communication with the staff in the senior school was a problem. All of the middle school class teachers and those who were primarily in that area knew exactly what was happening, and knew all of the middle school students, but communication with the senior school suffered a little. Secondly, it was found that the class teachers, who took their job as a class teacher very seriously, were under tremendous pressure. They had contact with parents and were personally involved with the thirty or so students in their classes. The parents were encouraged to come up and talk to the teachers and practically every day there would be four or five parents at the school talking to the class teachers. This really told. Personal contact with the teachers was encouraged so that parents would ring up at odd hours to talk to teachers.

Finally, it was again noted that it was planned to divide Years 9 to 12 into a junior high school and a senior high school. This would allow senior students to be treated more like adults. It would free senior students from some of the restrictions placed on them because they were in the same school as Year 9 and 10 students; for instance, wearing of school uniforms might not be compulsory for students in the senior school.

Don Rostedt's comments

Macgregor State High School had nearly 1600 students who came from a broad cross-section of socio-economic areas - Macgregor, Sunnybank, Robertson, down to Woodridge, and areas which have been long-settled and established such as Upper Mount Gravatt, out to the newer areas of Sunnybank Hills. There was thus a broad socio-economic range and a fairly intricate care system had to be set up.

The school was divided into four clans, which were each subdivided into about twenty clan groups. Thus, there were about eighty pastoral care groups in the school. These were not teaching groups. It was necessary to distinguish between a teaching group and a care group because the traditional view of students and teachers was that there was a difference between teaching and caring.

The clan groups were horizontal, not vertical, because the students said that they wanted to be with their peers and the teachers also found that they could relate better to students of one age group. A senior from Year 12 was allocated to each of these clan groups. The senior chose which year level he wanted to work with and he also chose a teacher with whom he knew he would have a good relationship. The clan groups had daily meetings and many activities were arranged in the areas of sporting, recreational and social activities and so on.

The system was co-ordinated by a clan co-ordinator, who prepared in-service programs for all of the clan teachers and generally oversaw the structure of the care system. The clan masters and mistresses and the year masters co-ordinated championship carnivals with fun carnivals, so as well as picking out champion sportsmen in swimming and athletics and so on, at the same time a fun carnival which was really a family day, was also held.

The school appointed a senior master in a caring role. He worked in conjunction with the senior mistress, who was appointed by the Education Department, but the senior master oversaw the care of all boys. The school was careful to house him next to the Guidance Officer because when new students came into the school, he was in a position to give them an orientation program and to make sure that they fitted into the school. He was not seen then as one of the administration, but he was up there with the other counsellors, so he was seen in that role.

The school was involved in a study of transition about six or seven years ago. The principal noted that the school did not come out of it very well. There were a number of reasons for this. The school had a traditional "egg crate" structure. It did not have the flexible spaces which most of its feeder schools had and this created problems. The school had since given careful attention to transition. Teacher exchanges and curriculum exchanges had been undertaken for several years. The greatest difficulty was in meeting or interfacing with the primary programs from the feeder schools because different feeder schools had reached different standards in different subjects. Further, different classes within those feeder schools had reached different standards of achievement.

The Year 8 co-ordinators visited all of the main feeder schools to talk to the students, particularly those in Year 7, and their parents in order to alleviate most of the problems of the students. Surveys had been undertaken which found that the biggest worries they had were drugs, sex and bullying. When the students came to high school, they found that drugs, sex and bullying were not problems at all. The Year 8 co-ordinators arranged an extensive program that stretched from Year 7 well into Year 8.

All of the year levels participated in an intricate structure of student council which had input from the students to the council and feedback to the students to let them know what was happening. The student councillors communicated to the school and were seen to be active and involved in the running of the school.

A care committee was also set up by the staff, of their own volition. This went beyond the pastoral care system because staff saw that in the present economic climate there were many students who, because they were economically disadvantaged, were also socially deprived. Staff therefore set up a system which involved parents and students providing facilities and resources for the students who had suffered this kind of problem. They had run raffles and received donations. They had written letters to the Federal Minister and the State Minister for Education saying that all schools in our present economic climate had these deprived students and that schools needed some sort of slush fund so that they could cater for the students who were deprived.

Don Rostedt then turned to the area of curriculum. In the school, Year 8 was a broad-ranging year: it was not a competitive year. All Year 8 students studied three foreign languages, manual arts, home economics and typewriting. The aim was to give students a broad range so that they would know a little bit about practically every subject.

A curriculum task force, on which there was parent representation, had been set up. Questionnaires were sent out to feeder schools. In the questionnaires, parents were asked what kind of program and what kind of subjects they wanted in the school. As a starting point, the curriculum task force went beyond subjects. They went to the Curriculum Development Centre's core curriculum. The nine or eleven areas considered by the Curriculum Development Centre were discussed, but the school decided that it still had to offer a subject-based curriculum. Nonetheless, the school considered that it was covering most of the CDC areas fairly well, although there were some deficiencies which still had to be alleviated.

Many of these issues were considered in relation to the junior school where delay of crucial choice was being practised. The problem of Social Science plummeting in usefulness in Year 9 and 10 (according to the students) was recognised. A social education course, which had as its first unit the identification of self (similar to the Year 8 unit), was set up. The program at St Peter's College was used as a model, although it was not possible to include a component on sex education.

There was a problem in mathematics in the middle school. Much of the mathematics course was not relevant, but the problem had not yet been resolved and was still being considered.

A core of five basic subjects was provided for all Year 9 and 10 students in the middle school. These were English, maths, science, health and P.E., and social education. This was intended to give students a basis for whatever type of life activity they would lead. Beyond that, students all chose four electives. If they chose three commercial subjects or three manual arts subjects, there was still room to broaden their experience by taking subjects in the creative areas. In choosing the four electives, students were encouraged to pick subjects which interested them, because in

the core they had what they would basically need wherever they were going in life. The principal considered that the school had done a lot to create interest in the middle school as far as curriculum offerings were concerned.

Finally, the school community believed that moral and values training was important. A board of Christian education had been set up and it was employing the only full-time counsellor of religious education in a State high school in Queensland. This was financed from the community's own resources.

Bob Rasmussen's comments

Bob Rasmussen commented on some initiatives for the education of early adolescents which had been undertaken at Warwick State High School.

Warwick State High School served an area of about one thousand square miles in the southern Darling Downs. Since the implementation of the Radford scheme in Queensland, it had tried to develop school subjects and to make them work. The one that had worked best was manual arts in the senior school. Its cost was estimated at $200,000, if the manual arts facilities were taken into account.

The other area which worked well was the transition education activity for Year 10 students. This course preceded the present departmental curriculum idea of a syllabus on career education. It was developed by the school and probably cost only a few hundred dollars.

A Schools Commission project, in which the school tried to help students who were alienated within the school, was a highly-funded program, but it was a failure.

The principal then considered why two of the projects were successful and the other was not. Firstly, manual arts was seen as entirely relevant by the boys and the girls as well. Use was able to be made of a group of top tradespersons, who were able to communicate effectively with the students, who were backed up with the right sort of equipment, and who felt confident to use it. Career education was seen by parents and children as being highly relevant, and it was tied in with work experience. Students saw themselves, despite the aims and objectives of work experience, as getting a long-term interview of a week or a fortnight with a prospective employer. Many students, parents, and employers considered that this was the aim of work experience. A number of the students in the school were offered work locally as a direct result of it. It succeeded, despite the small amount of money and the limited amount of staff time, because it was seen as highly relevant and dealing with the needs of people at a particular time.

The project which was a disappointment was the one in which an attempt was made to deal with alienated students. It was well-funded and well-conceived. Requests for reports on it had been received from quite remote schools, which thought that they might make it work. But at Warwick State High School it failed because of a staff attitude. Staff saw these students as the undesirable, unattractive students. The attitude developed in the school and it spread to parents and so did not attract customers, despite the fact that they existed.

The other point made by the principal concerned subject choice by students. This was based on discussions he had had with students from another school. Students were still choosing the subjects that led to entrance to a tertiary course. They were putting down school subjects that were highly interesting and highly relevant to everyday living, because the others were seen as a passport to something better.

Warwick State High School was organised as three units: a Year 8 centre which was staffed basically by older, ex-primary school male teachers; a Year 9 and Year 10 group; and a year 11 and 12 group. The principal was not strongly supportive of a further division because it was important for students of a particular age group to mix with older and younger students,

The principal concluded by arguing that many of the problems that he faced in the school were not problems of the school per se, but were problems which existed in the community of Warwick. Thus, an attempt was being made to bring adults into the school. Bringing senior students, up to the age of 80, into the school was found to be quite a useful exercise. A mother of a Year 9 boy was doing Senior. The boy's homework was improving in Year 9 consequently. The idea that the range of age in the

community should be reflected in the school was supported by the principal.

Summary of General Discussion

1. One member of the audience questioned whether differences in attitudes to school and self-image between students in primary and secondary school could be explained in terms of the changes which were occurring within students of that age, rather than in terms of the differing environments of primary and secondary schools, as Colin Power had suggested. Professor Power cited evidence, however, which showed that the most profound changes in student self-image occurred whenever the student transferred from one type of school to another. In some systems, transfer occurred when students were as young as 11, and in others when they were as old as 16.

2. It was suggested that it was important to provide opportunities for students to relate to people of all ages. Concern was expressed that, if separate institutions were established for 11-15 year olds, then this would lead to a narrowing of the age ranges which students were exposed to on a day-to-day basis.

3. Colin Power commented on a South Australian school which created opportunities for young people to mix socially and to engage in paid work. The school opened from 8 a.m. until 4.30 p.m. every day. Students in the school could explore a number of different avenues of adult work. The work experience was real and was followed up in the school afterwards. For example, the students repaired the furniture for other schools in the area and were paid by the schools for this. Their vision of the roles of adult life was broadened beyond that of employment in a single occupation. Students also went into the community and worked with young and old people. These people then came back into the school. In this way, the school and its students were helping to break down some of the barriers between school and community.

4. It was argued that it was necessary to identify the range of effective teaching strategies and to find ways of communicating this range of strategies to teachers. One method of communication would be for teachers to observe one another's teaching. Chances for this were, however, "miserably small". More opportunities therefore needed to be provided for communication among teachers and for teachers to observe a range of effective teaching styles. This would allow for effective teaching strategies to be identified and shared among teachers.

5. The importance of teachers and principals being caring, committed and loving was raised. It was suggested that this had implications for both the selection and education of teachers.

TEACHER EDUCATION AND THE MIDDLE SCHOOL*

John Manning,
Brisbane College of Advanced Education

The combination of available research and today's seminar would tend to show, in very brief terms, that younger adolescents need greater assistance in understanding their social and academic world; they need to discover who they are, what they believe in and value and why - and what the possible value alternatives are. I would also argue very positively that the kinds of teacher education proposals I later make will also provide seemingly happy adolescents with a more coherent and intelligible view of life and of learning. Before moving to the area of teacher preparation, a few brief comments on student needs will buttress my later proposals.

Vars (1977) and Wiles (1982) show that developing independence, becoming a person in one's own right, and learning a new mode of intellectual functioning are emotionally-laden problems for young adolescents.

The Schools Commission's report, *Schooling for 15 and 16 Year Olds*, underlines the fact that while the chronological age difference between upper primary and lower secondary is small, great changes occur in organisation, in curriculum, and in social and learning structures at this transitional stage.

Although Collins and Hughes (1982), for example, say that the needs of adolescents cannot be met by the present system, I am not arguing for separate middle schools - even though that may be highly desirable as a thought for the future.

Instead, my focus is on the preparation of teachers who could supposedly operate effectively at upper primary and lower secondary levels - between the ages of 11 and 15.

Because of this, there is a fairly obvious first requirement for teacher awareness of the changing needs of these children through chronological progression.

Let me say at the outset that this also implies a need for higher level teacher-understanding of the mismatch that can occur between physiological, intellectual and emotional characteristics at this stage of development.

In giving pride of place to the social-affective areas of learning and development, adequate training in adolescent psychology would be of paramount importance. This would hopefully be linked, where possible, in an ongoing way, with actual school contexts. While Brogdon (1978), for example, states that middle-school teacher-education programs must provide intensive and extensive exposure to middle-school aged youth, this concept is so fundamental that it hardly needs expert opinion to back it up. One focus of such an approach would be on exploring the characteristics of effective learning environments and of how such environments can be created and maintained. Power and Cotterell (1981) show that the academic high school environment is the cause of most frequent and persistent stress for a segment of the adolescent school population.

However, this linking of theory and practice would not only include, but also go beyond the area of child growth, to embrace a critical examination of the assumptions underlying educational practice in the broad sense. In addition, this philosophical and sociological perspective would include teacher awareness of educational and social change, and work and leisure opportunities - all very pertinent to adolescents at this level. Above all, this wider perspective would embrace cultural awareness.

To provide one illustration of what cultural awareness means in the Australian context, let me quote the case of Sturt CAE, South Australia. Following the recommendations of the National Inquiry into Teacher Education (1980), Sturt CAE decided that their general studies unit would contain three strands, namely:

1. The extent to which Australia had become a multicultural society and the impact of multiculturalism as an Australian identity.

---

* Note: This paper was prepared for delivery at the seminar, not as a written academic piece of work.

2. The establishment of a framework in which teachers might judge the scientific and technological changes going on around them and recognise the moral, social and aesthetic issues related to these changes and their impact on society.

3. Development of ability to understand how Australia is governed, not only in direct political terms, but also in terms of understanding decision-making in relation to the economy, the media and social change.

If anyone wished to argue that this kind of awareness should be common to all teachers, I would agree. I am trying to suggest, however, that such awareness is vital to the better-equipped teacher at this early adolescent level when such issues can be rendered more significant and meaningful.

It is probably logical now to consider the more formal or academic aspects of the teacher's role. While some would argue for a school curriculum based essentially on student needs and interests, the academic curriculum, as we know it, is likely to remain - despite the pleas of the Schools Commission's Report on 15 and 16 year olds.

One implication of this is that teachers be given the capacity to approach the disciplines more selectively, so that the curriculum becomes more pertinent to the needs, interests and life-styles of the adolescent student population.

Related to this, one could argue that such teachers require familiarity with a wide range of curricula and of how they can be linked through multi-disciplinary and integrated courses - an ultimate aim being to demonstrate the interrelatedness of knowledge. (The fragmented approach to the teaching of subjects has been too often condemned to need elaboration.)

Although Wiles and Bondi (1981) submit that middle school teachers possess a specialty in a single subject discipline, this does not contradict the more unified and coherent approach to the disciplines advocated earlier.

Above all, since a key aim is the development of greater meaning in the personal and academic lives of adolescents, teachers would require skills associated with the production of greater student autonomy, responsibility and creativity.

What else might such a program of teacher education incorporate?

Firstly, if we are really genuine about higher level and more complex understandings, teachers require a deeper knowledge of the complexity of schools as organisations. Although I haven't time to elaborate, the research of Weick (1976) and Doyle and Ponder (1978) reveals some truly fascinating findings about schools as organisations with interesting implications for teachers.

Secondly, I am not sure of the extent to which middle-school teachers should become administrators, but research exists to show that they need to plan and teach co-operatively and in teams, devise curriculum plans, be involved in decision-making concerning their own students, and in improving existing organisational patterns.

Thirdly, while no teacher can become highly skilled in all remedial areas, a knowledge of basic remedial techniques would seem essential.

Before proceeding to the question of teaching practice, something should be said about the vitally important area of participation. Wiles and Bondi (1981) believe that the effective middle-school teacher can build positive links between school and community, between teacher and parents, and between sub-cultures in the school. In the Australian context, there is probably more awareness than ever before of the need for wide participation. Evans (1975), for example, provides a variety of very practical forms such parent participation might take. Despite the dialogue and literature relevant to this participation theme in recent years, little of real significance has been done in practice.

The major implication of this is that teachers require the PR skills necessary for encouraging such participation by parents and the community.

Also related to this would be the need for middle school teachers to be aware of community resources and venues for learning and how to liaise with various groups offering counselling, welfare and assistance.

You will note that I have tried to avoid presenting a list of teacher education subjects. I have avoided this because highlighting broad areas of concern is surely more illuminating than mere subject titles, particularly in light of the restricted time I have been given for this paper.

Teaching Practice

It is quite true to say that teaching practice as it currently exists in secondary schools is sometimes far from ideal. A number of student teachers have fallen by the wayside because of the tremendous range of age and subjects encompassed by Years 8 to 12. Many student teachers find it so difficult to cater for this age range with respect to method and content, that adolescent needs probably don't receive even minor consideration.

On the other hand, the idea of teaching practice focusing on the middle school years is rich with possibilities. Obviously, teaching practice in diverse upper primary and lower secondary contexts would be essential. Where possible, such practice would encompass relevant private or independent schools as well as state schools, and centre on pastoral care as well as learning.

As I suggested earlier, teaching practice would ideally be deeply embedded in the whole program and not a discrete or meaningless annexe to it. In short, the desired emphasis would be a meaningful linking with school practice of the psychological, philosophical, sociological and academic aspects of the program.

What is required, in summary, is a body of teachers with the skills, flexibility, sensitivity and affective maturity necessary to sustain an effective pastoral care role, while rendering school learning more meaningful and stimulating.

In conclusion, how could such a course of training relate to existing college structures?

Personally, I do not see this as problematic and would include the following as possible alternatives:

(a) One possibility is to offer a four-year pre-service program for middle school teachers culminating in a B.Ed. In the case of Sturt CAE in South Australia, the first two years of the middle school B.Ed. is common to the whole college. The more specific middle school emphasis comes in Years 3 and 4.

(b) A second alternative is to allow selected primary and secondary teachers to undertake such a course as part of the present part-time in-service B.Ed. program.

(c) Thirdly, such a program could take the form of an endorsed primary or secondary diploma in teaching.

(d) A further possibility is that this could be done as an in-service PGI program.

Let me say, in conclusion, that while we would be guided significantly by the middle school developments in the U.K., the U.S.A., and South Australia, I believe that we should make use of the diverse group of staff on all three campuses who could contribute adventurously to such a program.

References

Brogdon, R.E. In search of competencies for preparing middle school teachers. *Peabody Journal of Education*, vol. 55, 1978, pp. 145-151.

Collins, C.W. and Hughes, P.W. *Looking backward*. Canberra: Schools Commission, 1980.

Collins, C.W. and Hughes, P.W. *Where junior secondary schools are heading. Australian Education Review, No. 16*. Melbourne: ACER, 1982.

Doyle, W. and Ponder, G.A. The practicality ethic in teacher decision-making. *Interchange*, vol. 8, 1978, pp. 1-12.

Evans, G.T. *Curriculum process and teachers*, Inaugural lecture delivered at the University of Queensland on 1 October 1975. St Lucia, Queensland. University of Queensland Press.

National Inquiry into Teacher Education, Canberra: Australian Government Publishing Service, 1980.

Power, C. and Cotterell, J. *Changes in students in the transition from primary to secondary school. ERDC Report No. 27*. Canberra: AGPS, 1981.

Schools Commission. *Schooling for 15 and 16 year olds*. Canberra: Schools Commission, 1980.

Vars, G.F. "Emphasising student involvement: A key to the future". In P.S. George (ed.). *The Middle School: A Look Ahead*. Ohio: National Middle School Association, 1977.

Weick, K.E. Educational organisations as loosely coupled systems. *Administrative Science Quarterly*, vol. 21, 1976.

Wiles, J. and Bondi, J. *The essential middle school*. Ohio: Merrill, 1981.

DISCUSSION FOLLOWING MANNING'S PAPER

Following Dr Manning's paper, the seminar was again thrown open for general discussion. Seminar participants were invited to put comments and questions to a panel of teacher educators consisting of:

Glen Evans, Professor of Teacher Education, University of Queensland

Ken Imison, Dean, School of Education, Darling Downs Institute of Advanced Education

Clem Young, Co-ordinator, Diploma of Teaching (Secondary), Brisbane College of Advanced Education.

Colin Power and John Manning were also invited to react to audience comments.

As part of the discussion, Glen Evans and Clem Young outlined the results of some of their own research and the implications of this for preparing teachers to teach early adolescents. These are given below and are followed by a summary of the general discussion.

Glen Evans's comments

Glen Evans reported the results of his study in which some 800 teachers throughout Australia were asked about the kinds of things they did in their classroom and the sorts of influences that beared on those activities, and the kinds of structures they had in schools. Principals of the eighty or so schools involved were asked similar questions.

In this study of teachers in Years 7 to 10 of the secondary school, it was found that, in Australian schools, typically it was the departmental structure which was the basic structure of secondary schools. Queensland was no different from the other states in that respect. From Year 7 upwards, the department was most important in decision-making. And it was the subject masters who were leaders of the school. The principal was certainly important in school-based decision-making, but what was really important in the school was what went on in the departments. Inside the departments, it was the subject master who was the influential person for the groups of teachers who worked in the department.

There was very very little interaction in most schools between pastoral care and teaching in the classroom. That is, if there was pastoral care it tended to be a separate function from actual classroom teaching. Pastoral care, therefore, did not percolate into the important things in life, as far as the students were concerned. There were some activities that the teachers carried out and there were certainly imperatives among those activities, such as giving praise and offering incentives and so on. But there were also some options. Surprisingly, in the thirty or so activities that teachers were questioned about, some of the options actually fell into what could be termed autonomy, i.e., giving the students some choice in their own learning, or making some decisions about how they would learn. That meant such things as going to the library, producing arguments, discussions in class and working in groups. Most teachers felt that they would like to do that kind of thing a great deal more than they actually did. There was certainly not consensus about the value of student autonomy, but there was a fairly high value placed on it.

There were some state differences among the teachers who responded to the questionnaire. Of the states and territories, Canberra teachers perceived themselves to be the most successful in terms of giving students some autonomy of the kind defined above. At the other end was the Queensland response, with all the other states falling in between. Over about eighteen of those thirty-six questions, the Queensland teachers consistently placed themselves at the low end. The teachers themselves saw time anxiety - getting through the work that had to be covered - class size and the availability of resources as the things that really confounded their hopes.

When questioned about the influences on their classroom activities, the majority of teachers did not mention any kind of in-service activity. They did not mention the principal as an in-service person; they did not mention inspectors or advisory teachers. These were, however, provided on the list they could have chosen from. The person they mentioned most was the subject master.

Glen Evans then went on to consider how the structure which he had described came into being.

He argued that structures were a response to tradition of some kind; they were a response to community expectations. Therefore, in order to change structures, it was necessary to involve the community in the process.

One attractive idea for bringing about structural change was the idea of flexibility of staff. In Queensland, there was a fairly rigid idea of staff development. It went from being a teacher to being a subject master, to a deputy principal, a principal, and so on. In some other states, and in Victoria, which was the one state in which subject masters were not quite so powerful, or were not seen as so influential, they had adopted a very different system. They had asked the schools to decide who had positions of responsibility and what those positions of responsibility were. A subject master in some schools was no different from being a co-ordinator of Year 8. In Queensland, a co-ordinator of Year 8 was not an official position.

A very very simple process might simply be to ask the schools to decide what the key positions of responsibility were. If it was decided that caring for Year 8 children should be emphasised, then these would be made status positions in the schools.

The implications for teacher education were then discussed. In-service education was considered first because it was felt that in-service education could be the way in which teachers could be helped to become expert as teachers of early adolescents. It was argued that the problem of helping to make teachers expert at teaching early adolescents could best be solved by regarding it as a school problem for the staff of the whole school to solve.

It was suggested that the best kind of teacher education was having experience, and it was having experience of solving problems like the one being discussed in real school settings. That meant structures must be changed. It meant that, for example, schools had to become much more experimental kinds of places; that the facility to solve problems was not impeded by external curriculum constraints; that the facility to solve problems was not impeded by rigid structural notions of how the school should be run. There should be opportunities for teachers to solve problems communally in schools.

Most primary teachers and principals had never had a role model, nor had many subject masters. There needed to be opportunities for young teachers to observe experienced teachers, and to be involved in team-teaching situations with them. Teachers needed to actually participate in solving the problems: that was the best way of learning.

As far as pre-service education was concerned, it was argued that its aim should be to induct student teachers into learning to teach; into the problem-solving mode of thinking. Student teachers should participate alongside experienced teachers. This could be accomplished during teaching practice, so that student teachers saw themselves participating alongside experienced teachers in a way that allowed them to be part of the problem-solving mode. This meant that better relationships between school people and institutional people would have to be established. Working relationships needed to be established at the school face. School-based pre-service teacher education, as well as school-based in-service education, was therefore a model of teacher education which should be given serious consideration.

Clem Young's comments

Clem Young considered that the critical issue was to identify the way in which teachers defined the nature of knowledge in the junior school. This was seen as the difference between junior school teachers and senior school teachers. All teachers needed to have the kinds of characteristics described in Manning's paper, but it was the way in which they looked at the processing of knowledge and information that characterised the way junior secondary school teachers would think.

He described a study in which he was involved which examined Douglas Barnes's transmission interpretation model. An instrument based on the model was applied to some teachers in Britain and in Queensland. The model placed teachers on a continuum from transmissive to interpretative. Transmissive teachers were seen as identifying knowledge as being external to human beings and something which could then be transmitted into the minds of waiting acolytes. The interpretative teacher, on the other hand, tended to start with people making meaning, with human motivation, with the needs of individuals and was more likely to define his pedagogy in terms of individual growth. Physics teachers tended to be rather transmissive in the way in which they defined knowledge probably because it was a discipline which was highly

external to the needs of individual human beings. On the other hand, art teachers tended to be well down the other end of the scale because they defined their curriculum in human terms.

Queensland teachers, as a group, were far more down the transmissive end of the scale than their English counterparts, although, as far as the disciplines were concerned, they fell in much the same kinds of range. There was one exception. The social studies teachers in Queensland were the rogues: they were much more transmissive than they ought to have been, according to the comparison with their British counterparts.

Junior school teachers should have an interpretative view of knowledge so that they did not start with the discipline which they were going to transmit, but started with individuals that they were going to help to make meaning.

Some suggestions for how this might be achieved at Brisbane College of Advanced Education were then described. The College was in a state of amalgamation and there were currently three secondary programs. In the Graduate Diploma, students took two subjects and were prepared to teach across the Year 8 to 12 range. The three-year secondary arts-humanities program from Mount Gravatt was a similar model with two teaching subjects across the Year 8 to Year 12 range and an option of including a third. The one which was different was Diploma of Teaching (Secondary) offered from Kelvin Grove. In that program, students undertook 50 per cent of their course in one discipline area, so that there was the opportunity to develop a strength in one discipline. In this discipline area, students were prepared to teach Year 8 to Year 12. A second teaching area took up 25 per cent of the course. The focus of the second teaching area was on the junior school. Thus, part of the first teaching area plus all of the second teaching area focused on the junior secondary school. It could be argued that this program formed the starting point from which a pre-service program designed for teachers of middle school could grow.

Clem Young then considered practice teaching, which was seen as the major influence on the way in which teachers perceived their roles as teachers. With 1200 students to place through about 100 high schools in Queensland, it was not possible to control quality or to move people through a range of different kinds of experiences. So there was a problem in knowing who was going to be providing this powerful influence on a teacher's teaching style.

Most of the experienced teachers tended to teach in Years 11 and 12. Many students therefore were likely to have some practice teaching situations in which they taught exclusively Year 11 and Year 12. This was especially so for the postgraduate students, who may not have had a great deal of experience in the junior school. These students could then be appointed to a Secondary Department, where they were teaching solely junior secondary students. There was a serious mismatch between the practical experiences provided, and the actual performance of the teachers' duties in their first four or five years of teaching.

The solution to this problem attempted by the Languages and Literature Department was then briefly described. Students in first year and in third year adopted a class in an appropriate school, either around Brisbane or in country schools. The selection of teachers could therefore be controlled. The teachers selected were those who could provide desirable and appropriate experiences in the junior school. The college class acted as an audience for school pupils' writing and also provided curriculum materials for the English class, which fitted the curriculum as defined by the school and by the teacher. The results had shown that the project had been successful. It also made it possible to use adult models as audiences for children's writing. It allowed the student teachers in first year to explore some alternative roles other than standing out the front and writing on vertical surfaces as a means of teaching. It allowed them to explore non-transmissive roles with small groups of individual children.

In second year, English curricula were considered from a more theoretical viewpoint. In third year the problem-solving model was again emphasised and the school-based model was again applied in the curriculum unit so that students tried to identify learning problems in English with their adopted class, and then these problems were used as a basis for the curriculum program in the college.

In summing up, Clem Young stated the critical issue was the way in which the teacher was inducted into perceiving knowledge during his or her teacher education program. This needed to be related to practical experiences in schools, and not simply seen as a

course of indoctrination for three years, the effects of which did not last more than about three months once the person actually tried to apply it.

Summary of General Discussion

1. There was some discussion concerning whether it was desirable for teachers to be specially prepared to teach in the early adolescent age range. One conference participant questioned whether it was logical to allow teachers to teach only in Years 7-10 when, he argued, most teachers would aspire to teach across all secondary year levels. On the other hand, some seminar participants argued that teachers who specialised in teaching early adolescent students would still be able to teach in one discipline area to Year 12.

   It was also argued that all teachers should be able to respond to the needs of early adolescents. This would require teachers with a strong self-image who had the ability to put the interests of their students before their own interests. Building a strong self-image could be enhanced by giving student teachers experience in assertiveness training and group dynamics. There were also implications for the selection of student teachers.

2. There was considerable discussion regarding whether, if it was desirable to specially prepare teachers to teach in the early adolescent years, this should be pre-service or in-service. Those favouring in-service argued that:

   - It would be difficult for students entering a teacher preparation program to choose between primary, secondary and middle school. After a number of years of teaching, however, teachers would be in a better position to know if they wanted to specialise in the teaching of early adolescents. They could develop this specialisation through in-service teacher education programs.
   - If teachers entered the profession with a middle school specialisation, then there was a danger that these teachers would be assigned to small country high schools and secondary departments and would be trapped there with little hope of promotion.

   Those seminar participants favouring a pre-service specialisation in early adolescent or middle school education argued that:

   - It was no more difficult for students to commit themselves to primary, secondary or middle school at the beginning of their program than it was for students to select from primary or secondary. Moreover, selecting an early adolescent specialisation helped to ensure that student teachers would be committed to the education of early adolescents from the start of their teaching careers.
   - Teachers of early adolescents needed a different type of understanding which it was desirable to build in the pre-service course.
   - Teachers specialising in the middle school would still be able to teach in one discipline area to Year 12.
   - As most beginning teachers undertook the majority of their first few years' teaching in the lower secondary year levels, then it was preferable for early adolescent development to be emphasised in the pre-service course. Preparation for teaching in the senior high school could then be built on to that through the in-service Bachelor of Education degree, or other in-service programs. The contention that beginning teachers' early experiences were mainly in the lower secondary years was disputed. It was contended that, especially in the smaller secondary schools, beginning teachers taught all year levels from Year 8 to Year 12.

3. Several speakers raised the issue of the need to have support structures within schools to help teachers in general and in particular those having problems with teaching early adolescent students. A need was seen to have structures in schools to support teachers needing to change and adapt their teaching methods in the face of resistance from others in the school. One way of overcoming this resistance to change would be to involve pairs of teachers in in-service activities so that they could mutually support each other. This could be facilitated when teachers were team-teaching in open area classrooms.

It was also suggested that counselling advice should be available in schools to help teachers who were having problems, for example, in adapting their teaching to the needs of the early adolescents in their care. One teacher reported that one of her functions was to act as a resource person who would help and counsel teachers. Interaction with the teachers was relaxed and informal and this seemed to work well. Resources were needed, however, to sustain this activity.

4. Representatives of the State Department of Education pointed out that the Department was moving towards developing and implementing K-10 curricula and K-12 curricula. It was argued that eventually this may have implications for both the organisational structure of schooling and for teacher education. In particular, it was considered that it would be necessary to consider whether the present organisation of teacher education was appropriate for a K-10 curriculum.

5. The implications of the likely increase in retention rates to Year 12 were discussed. The suggestion was made that it would be "sheer disaster" to continue to teach in the senior high school in the way teachers had been teaching in those year levels. The kinds of teachers and approaches to teaching which had been advocated for the middle school would need to be incorporated into the senior school so that they formed a "significant part" of teaching in the senior school. The desirability of incorporating middle school and transition education approaches into the teaching of all students at the upper secondary level was discussed.

6. It was suggested that there was an overemphasis in pre-service teacher education on teaching strategies and methodologies. Young teachers developed their own teaching style with little regard to adapting this to the learning styles of pupils. An argument was advanced therefore that there should be more emphasis on learning styles of pupils and how teachers might adapt their teaching to particular learning styles of students.

7. There was some discussion about the need to involve parents in the education of their children and to educate parents about the school. In particular, parents needed to be made aware of the organisation of the secondary school and its curricula and how these differed from the primary school. The notion of education as a sharing task involving students, parents and teachers was seen to be important. This could be encouraged by such means as students and parents working together on home projects and holding open days and field days at the school and other organisations. Teachers should be open to suggestions from parents and should be willing to talk openly about students to their parents. It was suggested that pre-service teacher education could include discussion of the role of parents in education and ways of involving parents in their children's education.

RECOMMENDATIONS FROM SEMINAR

Professor Colin Power summarised the seminar proceedings in six recommendations. These are given below.

1. School-based in-service programs and action research aimed at helping groups of teachers to solve problems of early adolescents in particular schools should be supported. This would include providing teachers with opportunities to visit schools which may be effectively meeting the needs of early adolescents and opportunities to visit other centres catering for early adolescents' needs, e.g. the Community Involvement Through Youth Program.

2. All pre-service programs should be examined to determine the extent to which they were preparing teachers to meet the changing needs of adolescents in our society. There should be greater emphasis on a problem-solving school-based mode, and systematic study of the problems of early adolescents. The theories given emphasis in pre-service teacher education should be those which come from teaching as a task, rather than those which come from psychology. This would involve the study of schools as organisational settings and how the organisational setting affected the interactions between teachers and students. An important element of this would be practical experience at a number of levels of schooling and in a number of different sorts of settings (e.g. advantaged and disadvantaged schools).

3. An information network which would allow curriculum materials and approaches to particular problems of early adolescents to be shared among teachers should be established. Support structures should be created for teachers and schools having difficulty coping with the problems of young adolescents. This would involve creating opportunities for teachers to move from school to school, to observe other teachers and to share ideas with other teachers.

4. During pre-service teacher education, student teachers should be given opportunities to develop a positive self-image and to develop their caring role. They should be given exposure to alternative ways of knowing and adapting so that when they were placed in schools their particular strengths matched the particular circumstances in which they found themselves.

5. There should be support structures, both within the school and outside of it, particularly for teachers working with early adolescents. Support external to the school would be important for teachers having problems with teaching early adolescents, but who felt they could not go to the principal or other teachers in the school for help.

6. Consideration should be given to the particular needs of parents and communities to understand the implications for young adolescents of the changes which are occurring in our society, and the implications in turn for schools and for teacher education. One of the biggest problems over the last five or six years had been the lack of confidence of the community in schools. Much of that lack of confidence stemmed from a lack of understanding of the changes which were occurring in schools and reasons why we appeared to be moving away from traditional subjects and traditional approaches to teaching. We should help the community and parents to understand the changes and be honest with them about the problems we faced. The idea of helping teachers to be prepared as "master teachers of their community" so that they were involved with what was happening to the community as a whole should be examined.

LIST OF CONFERENCE PARTICIPANTS

Dr Nola Alloway, James Cook University of North Queensland
Mr Ray Barrett, Toolooa State High School, Gladstone South
Mrs Maureen Bella, Board of Teacher Education
Mr Ray Collins, Centenary Heights State High School, Toowoomba
Mr Ian Creighton, Board of Secondary School Studies
Miss Debbie Cunningham, Board of Teacher Education
Mr Robert Dansie, Secondary School Inspector, Darling Downs Region
Mr Alan Druery, Queensland Catholic Education Office
Mr Greg Duck, Board of Teacher Education
Mr Keith Dwyer, Rochedale State High School
Mr Des Eastment, Division of Primary Education, Department of Education
Mr Max Emery, Brisbane Girls Grammar School
Professor Glen Evans, University of Queensland
Mr Robert Fifoot, Queensland Teachers Union
Mr Neville Fry, Board of Teacher Education
Rev. Bro. Robert Goodwin, Catholic Education Office
Ms Eleanor Gough, University of Queensland
Dr Bill Hall, Brisbane College of Advanced Education
Mrs Janet Hatcher, Special Education Unit, Glenmore State High School, Rockhampton
Mr Peter Hatcher, Capricornia Institute of Advanced Education
Mr Bill Heath, Queensland Council of Parents & Citizens Associations
Mr Alan Hendy, Ipswich State High School
Mr Ken Imison, Darling Downs Institute of Advanced Education
Mr Brian Jentz, Ipswich State High School
Mr Arthur Johnson, Rangeville State School, Toowoomba
Mr Gordon Jones, Brisbane College of Advanced Education
Dr Graham Jones, Brisbane College of Advanced Education
Mr Jim Leech, Division of Secondary Education, Department of Education
Mr Jim Lennon, Brisbane College of Advanced Education
Mr John Lesina, Ferny Hills State School
Mr Ross MacKee, Board of Teacher Education
Dr John Manning, Brisbane College of Advanced Education
Mr Ken Maynard, Division of Secondary Education, Department of Education
Dr Phil Meade, Brisbane College of Advanced Education
Dr Peter Meere, McAuley College
Mrs Dawn Muir, University of Queensland
Dr Geoff Orr, Brisbane College of Advanced Education
Associate Professor Millicent Poole, Macquarie University
Professor Colin Power, Flinders University of South Australia
Mr Bob Rasmussen, Warwick State High School
Mr Don Rostedt, Macgregor State High School
Dr John Sharwood, Board of Advanced Education
Mr James Sykes, Queensland Teachers Union
Mr Paul Thomas, Brisbane College of Advanced Education
Mrs Margaret Toomey, Queensland Federation of Parents & Friends Associations
Mr Brian Tracey, Pittsworth State High School
Mr Brian Ungerer, Brisbane College of Advanced Education
Mr Geoff Urquhart, Shailer Park State High School
Dr Andrew Wake, Capricornia Institute of Advanced Education
Mrs Patricia Waldby, Queensland Federation of Parents & Friends Associations
Mr Don Whittred, Brisbane-West Education Office
Mr David Woodrow, St Peter's Lutheran College, Indooroopilly
Dr Clem Young, Brisbane College of Advanced Education